

# ALMANAC LX TRANSITS VISIBLE FROM PLUTO IN CE

The almanac LX contains a list of transits visible from Pluto from the 1st millennium CE to the 125th millennium CE.

During the period of 250 000 years, the total number of transits visible from Pluto is 40 790 transits visible from Pluto (29 011 transits of Mercury, 5 744 transits of Venus, 2 555 transits of Earth, 2 550 transits of Moon, 883 transits of Mars, 38 transits of Jupiter, 9 transits of Saturn).

## 1ST MILLENNIUM CE

**This is a list of transits visible from Pluto in the 1st millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Moon	38-06-17 15:50 J		1735105.06	1735105.16	1735105.33	0.0079	0.0070	
Earth	38-06-17 18:28 J		1735105.20	1735105.27	1735105.41	0.0079	0.0073	*
Venus	41-05-16 01:12 J		1736168.40	1736168.55	1736168.72	0.0078	0.0054	
Mars	41-09-20 12:14 J		1736295.76	1736296.01	1736296.30	0.0077	0.0032	
Venus	41-12-27 10:47 J		1736393.74	1736393.95	1736394.18	0.0077	0.0008	
Venus	42-08-09 19:55 J		1736619.25	1736619.33	1736619.46	0.0077	0.0067	
Mercury	51-02-02 03:07 J		1739717.58	1739717.63	1739717.72	0.0072	0.0067	
Mercury	51-05-01 05:16 J		1739805.62	1739805.72	1739805.85	0.0072	0.0055	
Mercury	51-07-28 07:12 J		1739893.67	1739893.80	1739893.95	0.0072	0.0043	
Mercury	51-10-24 08:52 J		1739981.73	1739981.87	1739982.05	0.0072	0.0032	
Mercury	52-01-20 11:02 J		1740069.79	1740069.96	1740070.13	0.0072	0.0020	
Mercury	52-04-17 12:57 J		1740157.86	1740158.04	1740158.22	0.0072	0.0009	
Mercury	52-07-14 14:38 J		1740245.94	1740246.11	1740246.29	0.0072	0.0003	
Mercury	52-10-10 16:33 J		1740334.02	1740334.19	1740334.36	0.0072	0.0013	
Mercury	53-01-06 18:14 J		1740422.10	1740422.26	1740422.43	0.0072	0.0024	
Mercury	53-04-04 19:55 J		1740510.18	1740510.33	1740510.49	0.0071	0.0035	
Mercury	53-07-01 21:35 J		1740598.28	1740598.40	1740598.54	0.0071	0.0045	
Mercury	53-09-27 23:02 J		1740686.38	1740686.46	1740686.59	0.0071	0.0057	
Mercury	53-12-25 01:12 J		1740774.49	1740774.55	1740774.61	0.0071	0.0066	
Moon	197-12-17 12:14 J		1793362.79	1793363.01	1793363.26	0.0065	0.0023	
Earth	197-12-17 15:07 J		1793362.91	1793363.13	1793363.39	0.0065	0.0020	*
Venus	201-08-18 18:14 J		1794703.17	1794703.26	1794703.38	0.0066	0.0059	
Venus	202-03-31 23:16 J		1794928.27	1794928.47	1794928.69	0.0067	0.0021	
Venus	202-11-12 04:33 J		1795153.48	1795153.69	1795153.90	0.0067	0.0017	
Venus	203-06-25 09:07 J		1795378.78	1795378.88	1795379.02	0.0067	0.0056	

Mercury	212-10-15 15:35 J	1798779.13	1798779.15	1798779.19	0.0071	0.0070
Mercury	213-01-11 16:33 J	1798867.13	1798867.19	1798867.27	0.0072	0.0061
Mercury	213-04-09 17:16 J	1798955.14	1798955.22	1798955.33	0.0072	0.0053
Mercury	213-07-06 18:14 J	1799043.16	1799043.26	1799043.39	0.0072	0.0044
Mercury	213-10-02 19:12 J	1799131.19	1799131.30	1799131.44	0.0072	0.0035
Mercury	213-12-29 20:09 J	1799219.22	1799219.34	1799219.48	0.0072	0.0026
Mercury	214-03-27 21:07 J	1799307.25	1799307.38	1799307.53	0.0072	0.0017
Mercury	214-06-23 22:19 J	1799395.29	1799395.43	1799395.57	0.0072	0.0008
Mercury	214-09-19 23:16 J	1799483.33	1799483.47	1799483.61	0.0072	0.0002
Mercury	214-12-17 00:14 J	1799571.37	1799571.51	1799571.65	0.0072	0.0011
Mercury	215-03-15 00:57 J	1799659.41	1799659.54	1799659.69	0.0073	0.0021
Mercury	215-06-11 01:55 J	1799747.46	1799747.58	1799747.72	0.0073	0.0030
Mercury	215-09-07 03:07 J	1799835.51	1799835.63	1799835.75	0.0073	0.0039
Mercury	215-12-04 03:50 J	1799923.57	1799923.66	1799923.78	0.0073	0.0049
Mercury	216-03-01 05:02 J	1800011.63	1800011.71	1800011.80	0.0073	0.0058
Mercury	216-05-28 05:45 J	1800099.71	1800099.74	1800099.81	0.0073	0.0069
Venus	288-09-05 21:35 J	1826498.23	1826498.40	1826498.58	0.0078	0.0049
Venus	289-04-19 07:12 J	1826723.59	1826723.80	1826724.03	0.0077	0.0013
Venus	289-11-30 16:19 J	1826949.13	1826949.18	1826949.29	0.0077	0.0072
Mercury	298-03-13 12:57 J	1829974.00	1829974.04	1829974.10	0.0073	0.0069
Mercury	298-06-09 14:38 J	1830062.02	1830062.11	1830062.24	0.0072	0.0058
Mercury	298-09-05 16:47 J	1830150.07	1830150.20	1830150.35	0.0072	0.0046
Mercury	298-12-02 18:28 J	1830238.13	1830238.27	1830238.44	0.0072	0.0035
Mercury	299-02-28 20:24 J	1830326.19	1830326.35	1830326.53	0.0072	0.0023
Mercury	299-05-27 22:19 J	1830414.26	1830414.43	1830414.61	0.0072	0.0012
Mercury	299-08-24 00:14 J	1830502.34	1830502.51	1830502.69	0.0072	0.0001
Mercury	299-11-20 01:55 J	1830590.41	1830590.58	1830590.76	0.0072	0.0011
Mercury	300-02-16 03:50 J	1830678.49	1830678.66	1830678.83	0.0072	0.0022
Mercury	300-05-14 05:31 J	1830766.58	1830766.73	1830766.89	0.0071	0.0033
Mercury	300-08-10 07:12 J	1830854.67	1830854.80	1830854.95	0.0071	0.0043

Mercury	300-11-06 08:38 J	1830942.77	1830942.86	1830943.00	0.0071	0.0055
Mercury	301-02-02 10:47 J	1831030.88	1831030.95	1831031.03	0.0071	0.0064
Moon	444-12-18 12:00 J	1883580.81	1883581.00	1883581.24	0.0065	0.0035
Earth	444-12-18 15:21 J	1883580.96	1883581.14	1883581.38	0.0065	0.0037 *
Earth	445-12-20 02:38 J	1883947.54	1883947.61	1883947.75	0.0065	0.0060
Moon	445-12-20 06:00 J	1883947.66	1883947.75	1883947.91	0.0065	0.0058 *
Venus	448-12-09 12:14 J	1885032.95	1885033.01	1885033.10	0.0066	0.0062
Venus	449-07-22 17:16 J	1885258.02	1885258.22	1885258.43	0.0067	0.0024
Venus	450-03-04 22:19 J	1885483.22	1885483.43	1885483.65	0.0067	0.0014
Venus	450-10-16 03:07 J	1885708.51	1885708.63	1885708.78	0.0067	0.0053
Mercury	460-02-21 02:52 J	1889123.57	1889123.62	1889123.68	0.0071	0.0066
Mercury	460-05-19 03:35 J	1889211.58	1889211.65	1889211.75	0.0072	0.0057
Mercury	460-08-15 04:33 J	1889299.60	1889299.69	1889299.80	0.0072	0.0049
Mercury	460-11-11 05:31 J	1889387.62	1889387.73	1889387.86	0.0072	0.0040
Mercury	461-02-07 06:28 J	1889475.65	1889475.77	1889475.90	0.0072	0.0031
Mercury	461-05-06 07:26 J	1889563.68	1889563.81	1889563.95	0.0072	0.0022
Mercury	461-08-02 08:24 J	1889651.71	1889651.85	1889651.99	0.0072	0.0013
Mercury	461-10-29 09:21 J	1889739.75	1889739.89	1889740.04	0.0072	0.0004
Mercury	462-01-25 10:19 J	1889827.79	1889827.93	1889828.08	0.0072	0.0006
Mercury	462-04-23 11:16 J	1889915.83	1889915.97	1889916.11	0.0072	0.0015
Mercury	462-07-20 12:14 J	1890003.88	1890004.01	1890004.15	0.0073	0.0024
Mercury	462-10-16 12:57 J	1890091.93	1890092.04	1890092.18	0.0073	0.0034
Mercury	463-01-12 14:09 J	1890179.98	1890180.09	1890180.21	0.0073	0.0043
Mercury	463-04-10 14:52 J	1890268.04	1890268.12	1890268.23	0.0073	0.0053
Mercury	463-07-07 16:04 J	1890356.11	1890356.17	1890356.25	0.0073	0.0062
Mercury	463-10-03 17:02 J	1890444.20	1890444.21	1890444.24	0.0073	0.0072
Earth	533-06-21 14:24 J	1915907.87	1915908.10	1915908.33	0.0079	0.0039
Moon	533-06-21 14:38 J	1915907.91	1915908.11	1915908.36	0.0079	0.0038 *
Venus	535-12-28 14:24 J	1916827.96	1916828.10	1916828.26	0.0078	0.0056
Mars	536-05-21 07:55 J	1916972.74	1916972.83	1916972.94	0.0077	0.0073

Venus	536-08-10 00:14 J	1917053.29	1917053.51	1917053.73	0.0077	0.0005
Venus	537-03-23 09:21 J	1917278.79	1917278.89	1917279.03	0.0077	0.0065
Mercury	545-07-18 22:47 J	1920318.40	1920318.45	1920318.54	0.0073	0.0067
Mercury	545-10-15 00:57 J	1920406.43	1920406.54	1920406.67	0.0072	0.0055
Mercury	546-01-11 02:38 J	1920494.49	1920494.61	1920494.77	0.0072	0.0043
Mercury	546-04-09 04:47 J	1920582.55	1920582.70	1920582.86	0.0072	0.0031
Mercury	546-07-06 06:43 J	1920670.61	1920670.78	1920670.95	0.0072	0.0020
Mercury	546-10-02 08:24 J	1920758.68	1920758.85	1920759.03	0.0072	0.0009
Mercury	546-12-29 10:19 J	1920846.76	1920846.93	1920847.11	0.0072	0.0003
Mercury	547-03-27 12:00 J	1920934.83	1920935.00	1920935.18	0.0072	0.0014
Mercury	547-06-23 13:40 J	1921022.92	1921023.07	1921023.25	0.0072	0.0025
Mercury	547-09-19 15:21 J	1921111.00	1921111.14	1921111.31	0.0071	0.0036
Mercury	547-12-16 17:02 J	1921199.10	1921199.21	1921199.36	0.0071	0.0047
Mercury	548-03-13 19:12 J	1921287.20	1921287.30	1921287.41	0.0071	0.0057
Mercury	548-06-09 20:38 J	1921375.32	1921375.36	1921375.43	0.0071	0.0067
Earth	692-12-20 23:16 J	1974165.25	1974165.47	1974165.71	0.0065	0.0027
Moon	692-12-21 02:38 J	1974165.40	1974165.61	1974165.87	0.0065	0.0026 *
Venus	696-11-12 07:40 J	1975587.66	1975587.82	1975588.03	0.0067	0.0037
Venus	697-06-25 13:12 J	1975812.83	1975813.05	1975813.27	0.0067	0.0002
Venus	698-02-05 17:31 J	1976038.08	1976038.23	1976038.43	0.0067	0.0042
Mercury	707-06-28 12:57 J	1979468.00	1979468.04	1979468.09	0.0071	0.0067
Mercury	707-09-24 13:55 J	1979556.01	1979556.08	1979556.16	0.0071	0.0059
Mercury	707-12-21 14:52 J	1979644.02	1979644.12	1979644.22	0.0072	0.0050
Mercury	708-03-18 15:50 J	1979732.05	1979732.16	1979732.28	0.0072	0.0041
Mercury	708-06-14 16:33 J	1979820.07	1979820.19	1979820.33	0.0072	0.0033
Mercury	708-09-10 17:31 J	1979908.10	1979908.23	1979908.37	0.0072	0.0024
Mercury	708-12-07 18:43 J	1979996.14	1979996.28	1979996.42	0.0072	0.0015
Mercury	709-03-05 19:40 J	1980084.17	1980084.32	1980084.46	0.0072	0.0006
Mercury	709-06-01 20:38 J	1980172.21	1980172.36	1980172.50	0.0072	0.0004
Mercury	709-08-28 21:21 J	1980260.26	1980260.39	1980260.54	0.0072	0.0013

Mercury	709-11-24 22:19 J	1980348.30	1980348.43	1980348.57	0.0073	0.0023
Mercury	710-02-20 23:16 J	1980436.35	1980436.47	1980436.61	0.0073	0.0032
Mercury	710-05-20 00:28 J	1980524.40	1980524.52	1980524.64	0.0073	0.0041
Mercury	710-08-16 01:12 J	1980612.46	1980612.55	1980612.66	0.0073	0.0051
Mercury	710-11-12 02:24 J	1980700.52	1980700.60	1980700.68	0.0073	0.0061
Mercury	711-02-08 03:07 J	1980788.61	1980788.63	1980788.68	0.0073	0.0071
Moon	780-06-22 01:40 J	2006125.34	2006125.57	2006125.83	0.0079	0.0025
Earth	780-06-22 02:09 J	2006125.35	2006125.59	2006125.85	0.0079	0.0023 *
Venus	783-04-20 04:33 J	2007157.64	2007157.69	2007157.79	0.0078	0.0073
Venus	783-12-01 14:38 J	2007382.90	2007383.11	2007383.34	0.0077	0.0011
Venus	784-07-14 00:00 J	2007608.34	2007608.50	2007608.68	0.0077	0.0049
Mercury	792-11-23 08:09 J	2010662.79	2010662.84	2010662.91	0.0073	0.0068
Mercury	793-02-19 09:50 J	2010750.82	2010750.91	2010751.04	0.0072	0.0057
Mercury	793-05-18 12:00 J	2010838.87	2010839.00	2010839.15	0.0072	0.0044
Mercury	793-08-14 13:40 J	2010926.93	2010927.07	2010927.25	0.0072	0.0033
Mercury	793-11-10 15:50 J	2011014.99	2011015.16	2011015.33	0.0072	0.0021
Mercury	794-02-06 17:45 J	2011103.06	2011103.24	2011103.42	0.0072	0.0010
Mercury	794-05-05 19:40 J	2011191.14	2011191.32	2011191.49	0.0072	0.0002
Mercury	794-08-01 21:21 J	2011279.22	2011279.39	2011279.57	0.0072	0.0012
Mercury	794-10-28 23:02 J	2011367.30	2011367.46	2011367.63	0.0072	0.0024
Mercury	795-01-25 00:43 J	2011455.39	2011455.53	2011455.69	0.0071	0.0035
Mercury	795-04-23 02:24 J	2011543.48	2011543.60	2011543.75	0.0071	0.0045
Mercury	795-07-20 04:04 J	2011631.58	2011631.67	2011631.79	0.0071	0.0056
Mercury	795-10-16 06:00 J	2011719.70	2011719.75	2011719.82	0.0071	0.0067
Earth	939-12-22 17:31 J	2064382.98	2064383.23	2064383.49	0.0065	0.0009
Moon	939-12-22 21:07 J	2064383.13	2064383.38	2064383.63	0.0065	0.0006 *
Venus	944-03-04 21:07 J	2065917.28	2065917.38	2065917.55	0.0067	0.0053
Venus	944-10-16 02:52 J	2066142.41	2066142.62	2066142.84	0.0067	0.0014
Venus	945-05-29 07:26 J	2066367.63	2066367.81	2066368.04	0.0067	0.0025
Venus	946-01-09 12:14 J	2066592.98	2066593.01	2066593.11	0.0067	0.0065

Mercury	954-11-02 22:47 J	2069812.45	2069812.45	2069812.47	0.0071	0.0071
Mercury	955-01-29 23:31 J	2069900.43	2069900.48	2069900.56	0.0071	0.0063
Mercury	955-04-28 00:28 J	2069988.44	2069988.52	2069988.63	0.0072	0.0054
Mercury	955-07-25 01:26 J	2070076.46	2070076.56	2070076.68	0.0072	0.0045
Mercury	955-10-21 02:24 J	2070164.49	2070164.60	2070164.73	0.0072	0.0036
Mercury	956-01-17 03:21 J	2070252.51	2070252.64	2070252.78	0.0072	0.0027
Mercury	956-04-14 04:19 J	2070340.55	2070340.68	2070340.82	0.0072	0.0018
Mercury	956-07-11 05:16 J	2070428.58	2070428.72	2070428.86	0.0072	0.0009
Mercury	956-10-07 06:14 J	2070516.62	2070516.76	2070516.90	0.0072	0.0000
Mercury	957-01-03 07:12 J	2070604.66	2070604.80	2070604.94	0.0072	0.0009
Mercury	957-04-01 08:09 J	2070692.70	2070692.84	2070692.98	0.0072	0.0018
Mercury	957-06-28 09:07 J	2070780.75	2070780.88	2070781.01	0.0073	0.0028
Mercury	957-09-24 09:50 J	2070868.80	2070868.91	2070869.04	0.0073	0.0038
Mercury	957-12-21 10:47 J	2070956.85	2070956.95	2070957.07	0.0073	0.0047
Mercury	958-03-19 11:45 J	2071044.92	2071044.99	2071045.09	0.0073	0.0057
Mercury	958-06-15 12:57 J	2071132.99	2071133.04	2071133.10	0.0073	0.0066

## 2ND MILLENNIUM CE

This is a list of transits visible from Pluto in the 2nd millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Moon	1028-06-24 12:57 J	2096709.95	2096710.04	2096710.18	0.0079	0.0071		
Earth	1028-06-24 13:26 J	2096710.01	2096710.06	2096710.17	0.0079	0.0075 *		

Mars	1031-01-18 23:16 J	2097648.20	2097648.47	2097648.77	0.0077	0.0023
Venus	1031-03-24 01:55 J	2097712.41	2097712.58	2097712.79	0.0077	0.0039
Venus	1031-11-04 11:45 J	2097937.78	2097937.99	2097938.21	0.0077	0.0023
Mercury	1040-06-26 17:45 J	2101095.17	2101095.24	2101095.34	0.0072	0.0064
Mercury	1040-09-22 19:55 J	2101183.21	2101183.33	2101183.46	0.0072	0.0052
Mercury	1040-12-19 21:35 J	2101271.27	2101271.40	2101271.56	0.0072	0.0040
Mercury	1041-03-17 23:45 J	2101359.33	2101359.49	2101359.65	0.0072	0.0028
Mercury	1041-06-14 01:26 J	2101447.39	2101447.56	2101447.74	0.0072	0.0017
Mercury	1041-09-10 03:21 J	2101535.47	2101535.64	2101535.82	0.0072	0.0006
Mercury	1041-12-07 05:16 J	2101623.54	2101623.72	2101623.90	0.0072	0.0006
Mercury	1042-03-05 06:57 J	2101711.62	2101711.79	2101711.97	0.0072	0.0017
Mercury	1042-06-01 08:52 J	2101799.71	2101799.87	2101800.03	0.0072	0.0028
Mercury	1042-08-28 10:33 J	2101887.80	2101887.94	2101888.09	0.0071	0.0039
Mercury	1042-11-24 12:14 J	2101975.89	2101976.01	2101976.14	0.0071	0.0050
Mercury	1043-02-20 13:55 J	2102064.00	2102064.08	2102064.18	0.0071	0.0060
Mercury	1043-05-19 15:50 J	2102152.16	2102152.16	2102152.17	0.0071	0.0071
Earth	1186-12-23 07:40 J	2154600.74	2154600.82	2154600.97	0.0065	0.0058
Moon	1186-12-23 11:02 J	2154600.88	2154600.96	2154601.08	0.0065	0.0059 *
Moon	1187-12-24 16:04 J	2154966.98	2154967.17	2154967.40	0.0065	0.0039
Earth	1187-12-24 19:26 J	2154967.12	2154967.31	2154967.54	0.0065	0.0037 *
Mars	1191-10-18 15:07 J	2156360.80	2156361.13	2156361.48	0.0067	0.0010
Venus	1192-02-06 13:40 J	2156471.91	2156472.07	2156472.27	0.0067	0.0038
Venus	1192-09-18 19:11 J	2156697.08	2156697.30	2156697.52	0.0067	0.0001
Venus	1193-05-01 23:45 J	2156922.34	2156922.49	2156922.69	0.0067	0.0040
Mercury	1202-06-06 08:38 J	2160244.85	2160244.86	2160244.89	0.0071	0.0070
Mercury	1202-09-02 09:35 J	2160332.84	2160332.90	2160332.98	0.0071	0.0062
Mercury	1202-11-29 10:33 J	2160420.85	2160420.94	2160421.04	0.0072	0.0053
Mercury	1203-02-25 11:31 J	2160508.87	2160508.98	2160509.09	0.0072	0.0044
Mercury	1203-05-24 12:14 J	2160596.90	2160597.01	2160597.14	0.0072	0.0036
Mercury	1203-08-20 13:11 J	2160684.93	2160685.05	2160685.19	0.0072	0.0027



Mercury	1203-11-16 14:09 J	2160772.96	2160773.09	2160773.23	0.0072	0.0018
Mercury	1204-02-12 15:07 J	2160860.99	2160861.13	2160861.27	0.0072	0.0009
Mercury	1204-05-10 16:04 J	2160949.03	2160949.17	2160949.31	0.0072	0.0001
Mercury	1204-08-06 17:02 J	2161037.07	2161037.21	2161037.35	0.0072	0.0010
Mercury	1204-11-02 17:45 J	2161125.11	2161125.24	2161125.39	0.0072	0.0020
Mercury	1205-01-29 18:57 J	2161213.16	2161213.29	2161213.42	0.0073	0.0029
Mercury	1205-04-27 19:55 J	2161301.21	2161301.33	2161301.45	0.0073	0.0038
Mercury	1205-07-24 20:38 J	2161389.26	2161389.36	2161389.48	0.0073	0.0048
Mercury	1205-10-20 21:50 J	2161477.32	2161477.41	2161477.50	0.0073	0.0057
Mercury	1206-01-16 22:33 J	2161565.40	2161565.44	2161565.51	0.0073	0.0067
Earth	1275-06-25 17:16 J	2186926.98	2186927.22	2186927.49	0.0079	0.0020
Moon	1275-06-25 18:00 J	2186926.99	2186927.25	2186927.52	0.0079	0.0018 *
Venus	1278-07-14 11:16 J	2188041.92	2188041.97	2188042.07	0.0078	0.0073
Venus	1279-02-24 21:21 J	2188267.17	2188267.39	2188267.61	0.0077	0.0011
Venus	1279-10-08 06:28 J	2188492.61	2188492.77	2188492.95	0.0077	0.0049
Mercury	1288-01-29 02:38 J	2191527.54	2191527.61	2191527.72	0.0072	0.0063
Mercury	1288-04-26 04:48 J	2191615.59	2191615.70	2191615.84	0.0072	0.0051
Mercury	1288-07-23 06:57 J	2191703.64	2191703.79	2191703.94	0.0072	0.0039
Mercury	1288-10-19 08:38 J	2191791.70	2191791.86	2191792.03	0.0072	0.0027
Mercury	1289-01-15 10:33 J	2191879.77	2191879.94	2191880.12	0.0072	0.0016
Mercury	1289-04-13 12:28 J	2191967.85	2191968.02	2191968.20	0.0072	0.0004
Mercury	1289-07-10 14:24 J	2192055.92	2192056.10	2192056.28	0.0072	0.0007
Mercury	1289-10-06 16:04 J	2192144.00	2192144.17	2192144.35	0.0072	0.0018
Mercury	1290-01-02 17:45 J	2192232.09	2192232.24	2192232.41	0.0071	0.0030
Mercury	1290-03-31 19:26 J	2192320.18	2192320.31	2192320.47	0.0071	0.0041
Mercury	1290-06-27 21:07 J	2192408.28	2192408.38	2192408.52	0.0071	0.0052
Mercury	1290-09-23 22:48 J	2192496.39	2192496.45	2192496.55	0.0071	0.0063
Moon	1434-12-25 05:16 J	2245184.48	2245184.72	2245184.98	0.0065	0.0016
Earth	1434-12-25 08:24 J	2245184.62	2245184.85	2245185.11	0.0065	0.0018 *
Venus	1439-05-30 00:00 J	2246801.47	2246801.50	2246801.56	0.0066	0.0065

Venus	1440-01-10 04:48 J	2247026.52	2247026.70	2247026.92	0.0067	0.0027
Venus	1440-08-22 10:04 J	2247251.71	2247251.92	2247252.14	0.0067	0.0012
Venus	1441-04-04 14:52 J	2247476.99	2247477.12	2247477.27	0.0067	0.0052
Mercury	1450-04-05 18:57 J	2250765.24	2250765.29	2250765.37	0.0071	0.0064
Mercury	1450-07-02 19:55 J	2250853.25	2250853.33	2250853.43	0.0071	0.0055
Mercury	1450-09-28 20:52 J	2250941.27	2250941.37	2250941.49	0.0072	0.0046
Mercury	1450-12-25 21:50 J	2251029.29	2251029.41	2251029.54	0.0072	0.0037
Mercury	1451-03-23 22:48 J	2251117.32	2251117.45	2251117.58	0.0072	0.0028
Mercury	1451-06-19 23:45 J	2251205.35	2251205.49	2251205.63	0.0072	0.0019
Mercury	1451-09-16 00:43 J	2251293.39	2251293.53	2251293.67	0.0072	0.0010
Mercury	1451-12-13 01:40 J	2251381.42	2251381.57	2251381.71	0.0072	0.0002
Mercury	1452-03-10 02:24 J	2251469.46	2251469.60	2251469.75	0.0072	0.0009
Mercury	1452-06-06 03:21 J	2251557.51	2251557.64	2251557.78	0.0072	0.0018
Mercury	1452-09-02 04:19 J	2251645.55	2251645.68	2251645.82	0.0073	0.0027
Mercury	1452-11-29 05:02 J	2251733.60	2251733.71	2251733.85	0.0073	0.0037
Mercury	1453-02-25 06:14 J	2251821.65	2251821.76	2251821.87	0.0073	0.0046
Mercury	1453-05-24 06:57 J	2251909.71	2251909.79	2251909.90	0.0073	0.0056
Mercury	1453-08-20 08:09 J	2251997.78	2251997.84	2251997.91	0.0073	0.0065
Earth	1523-06-27 20:24 J	2277511.16	2277511.35	2277511.59	0.0079	0.0046
Moon	1523-06-27 20:38 J	2277511.16	2277511.36	2277511.59	0.0079	0.0042 *
Venus	1526-06-17 03:35 J	2278596.52	2278596.65	2278596.83	0.0077	0.0057
Venus	1527-01-28 13:26 J	2278821.85	2278822.06	2278822.29	0.0077	0.0006
Venus	1527-09-10 22:33 J	2279047.34	2279047.44	2279047.57	0.0077	0.0065
Mercury	1535-09-01 10:19 J	2281959.88	2281959.93	2281960.02	0.0072	0.0067
Mercury	1535-11-28 12:28 J	2282047.91	2282048.02	2282048.15	0.0072	0.0055
Mercury	1536-02-24 14:09 J	2282135.97	2282136.09	2282136.25	0.0072	0.0044
Mercury	1536-05-22 16:19 J	2282224.03	2282224.18	2282224.35	0.0072	0.0031
Mercury	1536-08-18 18:14 J	2282312.10	2282312.26	2282312.44	0.0072	0.0020
Mercury	1536-11-14 20:09 J	2282400.17	2282400.34	2282400.52	0.0072	0.0008
Mercury	1537-02-10 22:04 J	2282488.24	2282488.42	2282488.60	0.0072	0.0003

Mercury	1537-05-09 23:45 J	2282576.32	2282576.49	2282576.67	0.0072	0.0015
Mercury	1537-08-06 01:40 J	2282664.41	2282664.57	2282664.74	0.0072	0.0026
Mercury	1537-11-02 03:21 J	2282752.50	2282752.64	2282752.80	0.0071	0.0037
Mercury	1538-01-29 05:16 J	2282840.59	2282840.72	2282840.85	0.0071	0.0048
Mercury	1538-04-27 06:57 J	2282928.70	2282928.79	2282928.90	0.0071	0.0059
Mercury	1538-07-24 08:38 J	2283016.83	2283016.86	2283016.91	0.0071	0.0069
Earth	1683-01-06 05:16 G	2335768.48	2335768.72	2335768.98	0.0065	0.0011
Moon	1683-01-06 08:52 G	2335768.63	2335768.87	2335769.13	0.0065	0.0014 *
Venus	1687-05-12 12:28 G	2337355.97	2337356.02	2337356.13	0.0067	0.0062
Venus	1687-12-23 18:00 G	2337581.05	2337581.25	2337581.46	0.0067	0.0023
Venus	1688-08-04 22:48 G	2337806.25	2337806.45	2337806.67	0.0067	0.0016
Venus	1689-03-18 03:35 G	2338031.55	2338031.65	2338031.79	0.0067	0.0056
Mercury	1697-11-17 03:35 G	2341197.64	2341197.65	2341197.70	0.0071	0.0069
Mercury	1698-02-13 04:33 G	2341285.63	2341285.69	2341285.78	0.0071	0.0061
Mercury	1698-05-12 05:31 G	2341373.64	2341373.73	2341373.83	0.0072	0.0052
Mercury	1698-08-08 06:28 G	2341461.66	2341461.77	2341461.89	0.0072	0.0043
Mercury	1698-11-04 07:26 G	2341549.69	2341549.81	2341549.94	0.0072	0.0034
Mercury	1699-01-31 08:24 G	2341637.72	2341637.85	2341637.98	0.0072	0.0025
Mercury	1699-04-29 09:21 G	2341725.75	2341725.89	2341726.03	0.0072	0.0016
Mercury	1699-07-26 10:04 G	2341813.78	2341813.92	2341814.07	0.0072	0.0008
Mercury	1699-10-22 11:02 G	2341901.82	2341901.96	2341902.11	0.0072	0.0003
Mercury	1700-01-18 12:00 G	2341989.86	2341990.00	2341990.14	0.0072	0.0012
Mercury	1700-04-16 12:57 G	2342077.91	2342078.04	2342078.18	0.0072	0.0021
Mercury	1700-07-13 13:40 G	2342165.95	2342166.07	2342166.21	0.0073	0.0031
Mercury	1700-10-09 14:38 G	2342254.00	2342254.11	2342254.24	0.0073	0.0040
Mercury	1701-01-05 15:50 G	2342342.06	2342342.16	2342342.27	0.0073	0.0049
Mercury	1701-04-03 16:33 G	2342430.12	2342430.19	2342430.28	0.0073	0.0059
Mercury	1701-06-30 17:31 G	2342518.20	2342518.23	2342518.29	0.0073	0.0069
Moon	1770-07-08 14:52 G	2367728.09	2367728.12	2367728.20	0.0079	0.0078
Jupiter	1771-05-22 20:52 G	2368045.90	2368046.37	2368046.93	0.0079	0.0025

Mars	1774-01-06 13:40 G	2369005.78	2369006.07	2369006.37	0.0078	0.0010
Venus	1774-05-31 18:00 G	2369151.09	2369151.25	2369151.45	0.0077	0.0046
Venus	1775-01-12 03:50 G	2369376.45	2369376.66	2369376.88	0.0077	0.0015
Venus	1775-08-25 12:28 G	2369602.00	2369602.02	2369602.10	0.0077	0.0075
Mercury	1783-07-12 19:40 G	2372480.23	2372480.32	2372480.41	0.0072	0.0062
Mercury	1783-10-08 21:07 G	2372568.27	2372568.38	2372568.53	0.0072	0.0051
Mercury	1784-01-04 23:16 G	2372656.33	2372656.47	2372656.63	0.0072	0.0038
Mercury	1784-04-02 01:11 G	2372744.39	2372744.55	2372744.73	0.0072	0.0027
Mercury	1784-06-29 03:07 G	2372832.46	2372832.63	2372832.81	0.0072	0.0015
Mercury	1784-09-25 05:02 G	2372920.54	2372920.71	2372920.89	0.0072	0.0004
Mercury	1784-12-22 06:57 G	2373008.62	2373008.79	2373008.97	0.0072	0.0008
Mercury	1785-03-20 08:52 G	2373096.70	2373096.87	2373097.04	0.0072	0.0019
Mercury	1785-06-16 10:19 G	2373184.79	2373184.93	2373185.11	0.0071	0.0031
Mercury	1785-09-12 12:14 G	2373272.88	2373273.01	2373273.17	0.0071	0.0041
Mercury	1785-12-09 13:55 G	2373360.98	2373361.08	2373361.22	0.0071	0.0053
Mercury	1786-03-07 15:35 G	2373449.09	2373449.15	2373449.25	0.0071	0.0063
Earth	1930-01-09 11:31 G	2425985.94	2425985.98	2425986.08	0.0065	0.0062
Moon	1930-01-09 14:52 G	2425986.07	2425986.12	2425986.22	0.0065	0.0062 *
Moon	1931-01-10 19:40 G	2426352.12	2426352.32	2426352.57	0.0065	0.0032
Earth	1931-01-10 23:16 G	2426352.27	2426352.47	2426352.71	0.0065	0.0032 *
Mars	1934-10-05 08:24 G	2427715.61	2427715.85	2427716.15	0.0066	0.0041
Venus	1935-04-17 23:45 G	2427910.43	2427910.49	2427910.57	0.0067	0.0063
Venus	1935-11-29 04:33 G	2428135.51	2428135.69	2428135.92	0.0067	0.0025
Venus	1936-07-11 09:35 G	2428360.70	2428360.90	2428361.13	0.0067	0.0015
Venus	1937-02-21 14:24 G	2428586.00	2428586.10	2428586.26	0.0067	0.0055
Mercury	1945-09-19 12:43 G	2431718.01	2431718.03	2431718.07	0.0071	0.0070
Mercury	1945-12-16 13:55 G	2431806.01	2431806.08	2431806.15	0.0071	0.0061
Mercury	1946-03-14 14:24 G	2431894.02	2431894.10	2431894.21	0.0071	0.0052
Mercury	1946-06-10 15:21 G	2431982.04	2431982.14	2431982.26	0.0072	0.0044
Mercury	1946-09-06 16:19 G	2432070.06	2432070.18	2432070.31	0.0072	0.0035

Mercury	1946-12-03 17:16 G	2432158.09	2432158.22	2432158.35	0.0072	0.0026
Mercury	1947-03-01 18:00 G	2432246.12	2432246.25	2432246.40	0.0072	0.0017
Mercury	1947-05-28 19:11 G	2432334.16	2432334.30	2432334.44	0.0072	0.0007
Mercury	1947-08-24 20:09 G	2432422.20	2432422.34	2432422.48	0.0072	0.0002
Mercury	1947-11-20 20:52 G	2432510.24	2432510.37	2432510.52	0.0072	0.0011
Mercury	1948-02-16 21:50 G	2432598.28	2432598.41	2432598.55	0.0072	0.0020
Mercury	1948-05-14 22:48 G	2432686.32	2432686.45	2432686.58	0.0073	0.0030
Mercury	1948-08-10 23:31 G	2432774.37	2432774.48	2432774.61	0.0073	0.0040
Mercury	1948-11-07 00:28 G	2432862.43	2432862.52	2432862.64	0.0073	0.0049
Mercury	1949-02-03 01:26 G	2432950.49	2432950.56	2432950.66	0.0073	0.0059
Mercury	1949-05-02 02:38 G	2433038.57	2433038.61	2433038.66	0.0073	0.0068

# 3RD MILLENNIUM CE

This is a list of transits visible from Pluto in the 3rd millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Moon	2018-07-12 08:38 G	2458311.68	2458311.86	2458312.09	0.0079	0.0053		
Earth	2018-07-12 09:50 G	2458311.71	2458311.91	2458312.11	0.0079	0.0051	*	
Venus	2022-05-06 04:48 G	2459705.55	2459705.70	2459705.89	0.0077	0.0050		
Venus	2022-12-17 14:38 G	2459930.90	2459931.11	2459931.34	0.0077	0.0012		
Venus	2023-07-30 23:16 G	2460156.42	2460156.47	2460156.58	0.0077	0.0072		
Mercury	2031-05-14 02:38 G	2463000.55	2463000.61	2463000.71	0.0072	0.0064		
Mercury	2031-08-10 04:33 G	2463088.59	2463088.69	2463088.83	0.0072	0.0053		

Mercury	2031-11-06 06:43 G	2463176.64	2463176.78	2463176.94	0.0072	0.0040
Mercury	2032-02-02 08:52 G	2463264.71	2463264.87	2463265.03	0.0072	0.0029
Mercury	2032-04-30 10:33 G	2463352.77	2463352.94	2463353.12	0.0072	0.0017
Mercury	2032-07-27 12:28 G	2463440.85	2463441.02	2463441.20	0.0072	0.0006
Mercury	2032-10-23 14:24 G	2463528.92	2463529.10	2463529.28	0.0072	0.0006
Mercury	2033-01-19 16:04 G	2463617.01	2463617.17	2463617.35	0.0072	0.0018
Mercury	2033-04-17 18:00 G	2463705.09	2463705.25	2463705.42	0.0071	0.0029
Mercury	2033-07-14 19:55 G	2463793.18	2463793.33	2463793.48	0.0071	0.0040
Mercury	2033-10-10 21:35 G	2463881.28	2463881.40	2463881.53	0.0071	0.0051
Mercury	2034-01-06 23:31 G	2463969.40	2463969.48	2463969.57	0.0071	0.0062
Moon	2178-01-11 23:02 G	2516569.31	2516569.46	2516569.64	0.0065	0.0050
Earth	2178-01-12 02:24 G	2516569.48	2516569.60	2516569.77	0.0065	0.0053 *
Earth	2179-01-13 13:26 G	2516935.89	2516936.06	2516936.28	0.0065	0.0041
Moon	2179-01-13 17:16 G	2516936.01	2516936.22	2516936.44	0.0065	0.0037 *
Mars	2183-01-14 03:35 G	2518397.33	2518397.65	2518398.00	0.0066	0.0011
Venus	2183-11-02 13:11 G	2518689.88	2518690.05	2518690.26	0.0067	0.0034
Venus	2184-06-14 18:43 G	2518915.06	2518915.28	2518915.50	0.0067	0.0005
Venus	2185-01-25 23:02 G	2519140.33	2519140.46	2519140.65	0.0067	0.0046
Mercury	2193-10-16 21:50 G	2522326.37	2522326.41	2522326.47	0.0071	0.0065
Mercury	2194-01-12 22:48 G	2522414.37	2522414.45	2522414.54	0.0071	0.0057
Mercury	2194-04-10 23:45 G	2522502.39	2522502.49	2522502.60	0.0072	0.0048
Mercury	2194-07-08 00:43 G	2522590.41	2522590.53	2522590.65	0.0072	0.0039
Mercury	2194-10-04 01:11 G	2522678.44	2522678.55	2522678.69	0.0072	0.0031
Mercury	2194-12-31 02:24 G	2522766.47	2522766.60	2522766.74	0.0072	0.0021
Mercury	2195-03-29 03:21 G	2522854.50	2522854.64	2522854.78	0.0072	0.0012
Mercury	2195-06-25 04:19 G	2522942.54	2522942.68	2522942.82	0.0072	0.0003
Mercury	2195-09-21 05:02 G	2523030.57	2523030.71	2523030.86	0.0072	0.0007
Mercury	2195-12-18 06:00 G	2523118.61	2523118.75	2523118.89	0.0072	0.0016
Mercury	2196-03-15 06:57 G	2523206.66	2523206.79	2523206.92	0.0072	0.0025
Mercury	2196-06-11 07:40 G	2523294.71	2523294.82	2523294.96	0.0073	0.0035

Mercury	2196-09-07 08:38 G	2523382.76	2523382.86	2523382.98	0.0073	0.0044
Mercury	2196-12-04 09:35 G	2523470.81	2523470.90	2523471.00	0.0073	0.0054
Mercury	2197-03-02 10:33 G	2523558.88	2523558.94	2523559.02	0.0073	0.0063
Mercury	2197-05-29 11:45 G	2523646.99	2523646.99	2523646.99	0.0073	0.0073
Earth	2266-07-16 00:00 G	2548895.28	2548895.50	2548895.75	0.0079	0.0035
Moon	2266-07-16 01:26 G	2548895.35	2548895.56	2548895.79	0.0079	0.0039 *
Venus	2270-04-10 13:26 G	2550259.94	2550260.06	2550260.22	0.0077	0.0059
Venus	2270-11-21 23:16 G	2550485.25	2550485.47	2550485.70	0.0077	0.0002
Venus	2271-07-05 08:09 G	2550710.73	2550710.84	2550710.99	0.0077	0.0062
Mercury	2279-03-15 09:21 G	2553520.86	2553520.89	2553520.95	0.0073	0.0070
Mercury	2279-06-11 11:16 G	2553608.88	2553608.97	2553609.09	0.0072	0.0058
Mercury	2279-09-07 13:26 G	2553696.93	2553697.06	2553697.20	0.0072	0.0046
Mercury	2279-12-04 15:07 G	2553784.99	2553785.13	2553785.30	0.0072	0.0034
Mercury	2280-03-01 17:16 G	2553873.05	2553873.22	2553873.40	0.0072	0.0022
Mercury	2280-05-28 19:11 G	2553961.13	2553961.30	2553961.48	0.0072	0.0010
Mercury	2280-08-24 21:07 G	2554049.20	2554049.38	2554049.56	0.0072	0.0001
Mercury	2280-11-20 22:48 G	2554137.28	2554137.45	2554137.63	0.0072	0.0013
Mercury	2281-02-17 00:43 G	2554225.37	2554225.53	2554225.70	0.0072	0.0024
Mercury	2281-05-16 02:09 G	2554313.46	2554313.59	2554313.77	0.0071	0.0036
Mercury	2281-08-12 04:04 G	2554401.55	2554401.67	2554401.82	0.0071	0.0046
Mercury	2281-11-08 05:45 G	2554489.66	2554489.74	2554489.87	0.0071	0.0058
Mercury	2282-02-04 07:40 G	2554577.79	2554577.82	2554577.89	0.0071	0.0068
Earth	2426-01-15 13:40 G	2607152.96	2607153.07	2607153.25	0.0064	0.0054
Moon	2426-01-15 17:31 G	2607153.10	2607153.23	2607153.41	0.0064	0.0052 *
Moon	2427-01-16 23:16 G	2607519.28	2607519.47	2607519.68	0.0065	0.0039
Earth	2427-01-17 01:26 G	2607519.37	2607519.56	2607519.77	0.0065	0.0040 *
Mars	2431-04-25 14:38 G	2609078.90	2609079.11	2609079.41	0.0066	0.0045
Venus	2431-10-07 19:55 G	2609244.19	2609244.33	2609244.48	0.0067	0.0049
Venus	2432-05-20 00:57 G	2609469.33	2609469.54	2609469.76	0.0067	0.0010
Venus	2432-12-31 05:45 G	2609694.56	2609694.74	2609694.95	0.0067	0.0029

Mercury	2441-11-14 06:00 G	2612934.71	2612934.75	2612934.82	0.0071	0.0066
Mercury	2442-02-10 06:57 G	2613022.72	2613022.79	2613022.88	0.0071	0.0057
Mercury	2442-05-09 07:55 G	2613110.73	2613110.83	2613110.94	0.0071	0.0048
Mercury	2442-08-05 08:52 G	2613198.75	2613198.87	2613198.99	0.0072	0.0039
Mercury	2442-11-01 09:50 G	2613286.78	2613286.91	2613287.04	0.0072	0.0030
Mercury	2443-01-28 10:33 G	2613374.81	2613374.94	2613375.08	0.0072	0.0021
Mercury	2443-04-26 11:31 G	2613462.84	2613462.98	2613463.12	0.0072	0.0012
Mercury	2443-07-23 12:28 G	2613550.88	2613551.02	2613551.16	0.0072	0.0003
Mercury	2443-10-19 13:26 G	2613638.92	2613639.06	2613639.20	0.0072	0.0006
Mercury	2444-01-15 14:09 G	2613726.96	2613727.09	2613727.23	0.0072	0.0016
Mercury	2444-04-12 15:07 G	2613815.00	2613815.13	2613815.27	0.0072	0.0025
Mercury	2444-07-09 15:50 G	2613903.05	2613903.16	2613903.30	0.0073	0.0035
Mercury	2444-10-05 17:02 G	2613991.10	2613991.21	2613991.33	0.0073	0.0044
Mercury	2445-01-01 17:45 G	2614079.16	2614079.24	2614079.35	0.0073	0.0054
Mercury	2445-03-30 18:43 G	2614167.22	2614167.28	2614167.36	0.0073	0.0063
Mercury	2445-06-26 19:55 G	2614255.33	2614255.33	2614255.34	0.0073	0.0073
Moon	2514-07-19 03:35 G	2639478.46	2639478.65	2639478.89	0.0079	0.0047
Earth	2514-07-19 06:28 G	2639478.59	2639478.77	2639479.01	0.0079	0.0048 *
Venus	2518-10-27 03:21 G	2641039.44	2641039.64	2641039.86	0.0077	0.0024
Venus	2519-06-09 12:43 G	2641264.85	2641265.03	2641265.24	0.0077	0.0037
Mercury	2527-04-12 16:19 G	2644129.15	2644129.18	2644129.22	0.0073	0.0071
Mercury	2527-07-09 18:28 G	2644217.17	2644217.27	2644217.37	0.0072	0.0059
Mercury	2527-10-05 19:55 G	2644305.21	2644305.33	2644305.49	0.0072	0.0047
Mercury	2528-01-01 22:04 G	2644393.27	2644393.42	2644393.59	0.0072	0.0035
Mercury	2528-03-30 00:00 G	2644481.34	2644481.50	2644481.68	0.0072	0.0024
Mercury	2528-06-26 01:55 G	2644569.41	2644569.58	2644569.77	0.0072	0.0012
Mercury	2528-09-22 04:04 G	2644657.49	2644657.67	2644657.85	0.0072	0.0001
Mercury	2528-12-19 05:45 G	2644745.57	2644745.74	2644745.92	0.0072	0.0012
Mercury	2529-03-17 07:40 G	2644833.65	2644833.82	2644833.99	0.0072	0.0023
Mercury	2529-06-13 09:07 G	2644921.74	2644921.88	2644922.06	0.0071	0.0035



Mercury	2529-09-09 11:02 G	2645009.84	2645009.96	2645010.11	0.0071	0.0045
Mercury	2529-12-06 12:43 G	2645097.94	2645098.03	2645098.16	0.0071	0.0057
Mercury	2530-03-04 14:38 G	2645186.07	2645186.11	2645186.18	0.0071	0.0067
Earth	2674-01-18 22:19 G	2697736.42	2697736.43	2697736.49	0.0064	0.0064
Earth	2675-01-20 09:50 G	2698102.69	2698102.91	2698103.14	0.0065	0.0029
Moon	2675-01-20 11:16 G	2698102.76	2698102.97	2698103.22	0.0065	0.0032 *
Mars	2679-08-04 19:55 G	2699760.22	2699760.33	2699760.48	0.0067	0.0061
Venus	2680-04-24 04:48 G	2700023.53	2700023.70	2700023.91	0.0067	0.0033
Venus	2680-12-05 10:19 G	2700248.72	2700248.93	2700249.15	0.0067	0.0007
Venus	2681-07-18 15:07 G	2700473.99	2700474.13	2700474.30	0.0067	0.0047
Mercury	2689-12-12 13:55 G	2703543.05	2703543.08	2703543.12	0.0071	0.0069
Mercury	2690-03-10 14:24 G	2703631.04	2703631.10	2703631.19	0.0071	0.0061
Mercury	2690-06-06 15:21 G	2703719.06	2703719.14	2703719.25	0.0071	0.0052
Mercury	2690-09-02 16:19 G	2703807.08	2703807.18	2703807.30	0.0072	0.0043
Mercury	2690-11-29 17:16 G	2703895.10	2703895.22	2703895.35	0.0072	0.0034
Mercury	2691-02-25 18:14 G	2703983.13	2703983.26	2703983.39	0.0072	0.0025
Mercury	2691-05-24 19:11 G	2704071.16	2704071.30	2704071.44	0.0072	0.0016
Mercury	2691-08-20 20:09 G	2704159.20	2704159.34	2704159.48	0.0072	0.0007
Mercury	2691-11-16 20:52 G	2704247.23	2704247.37	2704247.52	0.0072	0.0003
Mercury	2692-02-12 21:50 G	2704335.27	2704335.41	2704335.55	0.0072	0.0012
Mercury	2692-05-10 22:48 G	2704423.32	2704423.45	2704423.59	0.0072	0.0021
Mercury	2692-08-06 23:31 G	2704511.36	2704511.48	2704511.62	0.0072	0.0031
Mercury	2692-11-03 00:43 G	2704599.41	2704599.53	2704599.65	0.0073	0.0040
Mercury	2693-01-30 01:26 G	2704687.47	2704687.56	2704687.67	0.0073	0.0050
Mercury	2693-04-28 02:38 G	2704775.53	2704775.61	2704775.69	0.0073	0.0059
Mercury	2693-07-25 03:21 G	2704863.61	2704863.64	2704863.69	0.0073	0.0069
Earth	2762-07-22 11:02 G	2730061.85	2730061.96	2730062.08	0.0079	0.0071
Moon	2762-07-22 14:24 G	2730061.97	2730062.10	2730062.24	0.0079	0.0067 *
Venus	2766-10-01 06:14 G	2731593.61	2731593.76	2731593.92	0.0077	0.0055
Venus	2767-05-14 15:50 G	2731818.94	2731819.16	2731819.39	0.0077	0.0006

Venus	2767-12-26 00:43 G	2732044.44	2732044.53	2732044.66	0.0076	0.0066
Mercury	2775-08-07 00:00 G	2734825.43	2734825.50	2734825.61	0.0072	0.0064
Mercury	2775-11-03 01:55 G	2734913.47	2734913.58	2734913.73	0.0072	0.0052
Mercury	2776-01-30 04:04 G	2735001.53	2735001.67	2735001.83	0.0072	0.0039
Mercury	2776-04-27 06:14 G	2735089.60	2735089.76	2735089.93	0.0072	0.0027
Mercury	2776-07-24 07:55 G	2735177.67	2735177.83	2735178.02	0.0072	0.0016
Mercury	2776-10-20 10:04 G	2735265.74	2735265.92	2735266.10	0.0072	0.0004
Mercury	2777-01-16 12:00 G	2735353.82	2735354.00	2735354.18	0.0072	0.0008
Mercury	2777-04-14 13:55 G	2735441.90	2735442.08	2735442.25	0.0072	0.0019
Mercury	2777-07-11 15:21 G	2735529.99	2735530.14	2735530.32	0.0071	0.0031
Mercury	2777-10-07 17:16 G	2735618.09	2735618.22	2735618.38	0.0071	0.0042
Mercury	2778-01-03 19:26 G	2735706.19	2735706.31	2735706.43	0.0071	0.0053
Mercury	2778-04-01 20:38 G	2735794.30	2735794.36	2735794.46	0.0071	0.0064
Earth	2923-01-23 15:50 G	2788685.91	2788686.16	2788686.42	0.0065	0.0010
Moon	2923-01-23 16:04 G	2788685.93	2788686.17	2788686.42	0.0065	0.0011 *
Mars	2927-11-13 18:00 G	2790441.17	2790441.25	2790441.40	0.0066	0.0063
Venus	2928-03-29 07:11 G	2790577.73	2790577.80	2790577.91	0.0067	0.0061
Venus	2928-11-09 12:28 G	2790802.83	2790803.02	2790803.24	0.0067	0.0022
Venus	2929-06-22 17:31 G	2791028.03	2791028.23	2791028.46	0.0067	0.0018
Venus	2930-02-02 22:48 G	2791253.35	2791253.45	2791253.57	0.0067	0.0058
Mercury	2938-04-07 21:21 G	2794239.36	2794239.39	2794239.45	0.0071	0.0068
Mercury	2938-07-04 22:33 G	2794327.36	2794327.44	2794327.52	0.0071	0.0059
Mercury	2938-09-30 23:02 G	2794415.38	2794415.46	2794415.58	0.0071	0.0051
Mercury	2938-12-28 00:00 G	2794503.40	2794503.50	2794503.63	0.0071	0.0041
Mercury	2939-03-26 00:57 G	2794591.42	2794591.54	2794591.67	0.0072	0.0032
Mercury	2939-06-22 01:55 G	2794679.45	2794679.58	2794679.72	0.0072	0.0023
Mercury	2939-09-18 02:52 G	2794767.48	2794767.62	2794767.76	0.0072	0.0014
Mercury	2939-12-15 03:50 G	2794855.52	2794855.66	2794855.80	0.0072	0.0005
Mercury	2940-03-12 04:48 G	2794943.56	2794943.70	2794943.84	0.0072	0.0004
Mercury	2940-06-08 05:31 G	2795031.60	2795031.73	2795031.87	0.0072	0.0013

Mercury	2940-09-04 06:28 G	2795119.64	2795119.77	2795119.91	0.0072	0.0023
Mercury	2940-12-01 07:11 G	2795207.69	2795207.80	2795207.94	0.0072	0.0032
Mercury	2941-02-27 08:09 G	2795295.73	2795295.84	2795295.97	0.0073	0.0042
Mercury	2941-05-26 09:21 G	2795383.79	2795383.89	2795383.99	0.0073	0.0051
Mercury	2941-08-22 10:04 G	2795471.85	2795471.92	2795472.00	0.0073	0.0061
Mercury	2941-11-18 10:48 G	2795559.94	2795559.95	2795560.00	0.0073	0.0071

# 4TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 4th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Earth	3011-07-27 12:14 G		2821011.86	2821012.01	2821012.23	0.0079	0.0058	
Moon	3011-07-27 15:50 G		2821011.98	2821012.16	2821012.36	0.0079	0.0056	*
Venus	3015-04-18 14:09 G		2822372.91	2822373.09	2822373.29	0.0077	0.0041	
Venus	3015-11-29 23:31 G		2822598.27	2822598.48	2822598.70	0.0077	0.0020	
Mercury	3023-12-01 06:28 G		2825521.70	2825521.77	2825521.87	0.0072	0.0064	
Mercury	3024-02-27 08:24 G		2825609.74	2825609.85	2825609.99	0.0072	0.0052	
Mercury	3024-05-25 10:19 G		2825697.80	2825697.93	2825698.10	0.0072	0.0040	
Mercury	3024-08-21 12:28 G		2825785.86	2825786.02	2825786.19	0.0072	0.0027	
Mercury	3024-11-17 14:38 G		2825873.93	2825874.11	2825874.28	0.0072	0.0015	
Mercury	3025-02-13 16:33 G		2825962.01	2825962.19	2825962.37	0.0072	0.0004	
Mercury	3025-05-12 18:14 G		2826050.09	2826050.26	2826050.44	0.0072	0.0008	
Mercury	3025-08-08 19:55 G		2826138.17	2826138.33	2826138.52	0.0072	0.0020	

Mercury	3025-11-04 22:04 G	2826226.26	2826226.42	2826226.58	0.0071	0.0031
Mercury	3026-01-31 23:31 G	2826314.35	2826314.48	2826314.64	0.0071	0.0043
Mercury	3026-04-30 01:26 G	2826402.46	2826402.56	2826402.69	0.0071	0.0053
Mercury	3026-07-27 03:21 G	2826490.58	2826490.64	2826490.72	0.0071	0.0064
Moon	3171-01-26 18:28 G	2879269.04	2879269.27	2879269.55	0.0064	0.0018
Earth	3171-01-26 19:55 G	2879269.09	2879269.33	2879269.58	0.0064	0.0015 *
Mars	3176-02-22 12:28 G	2881121.86	2881122.02	2881122.22	0.0066	0.0056
Venus	3176-10-14 13:55 G	2881356.96	2881357.08	2881357.22	0.0067	0.0053
Venus	3177-05-27 18:57 G	2881582.08	2881582.29	2881582.51	0.0067	0.0014
Venus	3178-01-07 23:45 G	2881807.31	2881807.49	2881807.71	0.0067	0.0026
Venus	3178-08-21 04:33 G	2882032.68	2882032.69	2882032.76	0.0067	0.0067
Mercury	3186-08-02 05:02 G	2884935.68	2884935.71	2884935.76	0.0071	0.0067
Mercury	3186-10-29 06:00 G	2885023.68	2885023.75	2885023.83	0.0071	0.0059
Mercury	3187-01-25 06:43 G	2885111.69	2885111.78	2885111.89	0.0071	0.0050
Mercury	3187-04-23 07:26 G	2885199.71	2885199.81	2885199.94	0.0071	0.0042
Mercury	3187-07-20 08:24 G	2885287.74	2885287.85	2885287.99	0.0072	0.0033
Mercury	3187-10-16 09:21 G	2885375.77	2885375.89	2885376.03	0.0072	0.0024
Mercury	3188-01-12 10:19 G	2885463.80	2885463.93	2885464.07	0.0072	0.0014
Mercury	3188-04-09 11:16 G	2885551.83	2885551.97	2885552.11	0.0072	0.0005
Mercury	3188-07-06 12:14 G	2885639.87	2885640.01	2885640.15	0.0072	0.0004
Mercury	3188-10-02 13:11 G	2885727.91	2885728.05	2885728.19	0.0072	0.0013
Mercury	3188-12-29 13:55 G	2885815.95	2885816.08	2885816.22	0.0072	0.0023
Mercury	3189-03-27 14:38 G	2885904.00	2885904.11	2885904.25	0.0072	0.0033
Mercury	3189-06-23 15:35 G	2885992.05	2885992.15	2885992.28	0.0073	0.0042
Mercury	3189-09-19 16:48 G	2886080.10	2886080.20	2886080.30	0.0073	0.0051
Mercury	3189-12-16 17:31 G	2886168.17	2886168.23	2886168.32	0.0073	0.0061
Mercury	3190-03-14 18:14 G	2886256.25	2886256.26	2886256.31	0.0073	0.0071
Moon	3259-07-29 07:55 G	2911594.58	2911594.83	2911595.09	0.0079	0.0009
Earth	3259-07-29 10:04 G	2911594.66	2911594.92	2911595.19	0.0079	0.0005 *
Venus	3263-11-02 22:19 G	2913152.22	2913152.43	2913152.64	0.0077	0.0027

Venus	3264-06-15 07:11 G	2913377.62	2913377.80	2913378.02	0.0077	0.0034
Mercury	3272-03-25 12:43 G	2916217.96	2916218.03	2916218.13	0.0072	0.0064
Mercury	3272-06-21 14:38 G	2916306.00	2916306.11	2916306.25	0.0072	0.0052
Mercury	3272-09-17 16:48 G	2916394.06	2916394.20	2916394.36	0.0072	0.0039
Mercury	3272-12-14 18:43 G	2916482.12	2916482.28	2916482.46	0.0072	0.0028
Mercury	3273-03-12 20:52 G	2916570.19	2916570.37	2916570.55	0.0072	0.0015
Mercury	3273-06-08 22:48 G	2916658.27	2916658.45	2916658.63	0.0072	0.0004
Mercury	3273-09-05 00:43 G	2916746.35	2916746.53	2916746.71	0.0072	0.0008
Mercury	3273-12-02 02:24 G	2916834.43	2916834.60	2916834.78	0.0072	0.0020
Mercury	3274-02-28 04:19 G	2916922.52	2916922.68	2916922.85	0.0072	0.0031
Mercury	3274-05-27 06:00 G	2917010.62	2917010.75	2917010.90	0.0071	0.0042
Mercury	3274-08-23 07:55 G	2917098.72	2917098.83	2917098.95	0.0071	0.0054
Mercury	3274-11-19 09:50 G	2917186.84	2917186.91	2917186.99	0.0071	0.0065
Earth	3419-01-29 21:50 G	2969852.25	2969852.41	2969852.62	0.0064	0.0046
Moon	3419-01-30 00:43 G	2969852.38	2969852.53	2969852.72	0.0064	0.0048 *
Moon	3420-01-31 05:31 G	2970218.59	2970218.73	2970218.93	0.0065	0.0049
Earth	3420-01-31 09:21 G	2970218.73	2970218.89	2970219.08	0.0065	0.0047 *
Mars	3424-06-02 01:26 G	2971802.32	2971802.56	2971802.88	0.0066	0.0039
Venus	3425-05-01 18:43 G	2972136.15	2972136.28	2972136.44	0.0067	0.0050
Venus	3425-12-13 00:14 G	2972361.30	2972361.51	2972361.73	0.0067	0.0010
Venus	3426-07-26 05:16 G	2972586.53	2972586.72	2972586.92	0.0067	0.0029
Mercury	3434-11-26 12:00 G	2975632.00	2975632.00	2975632.04	0.0071	0.0070
Mercury	3435-02-22 12:57 G	2975719.98	2975720.04	2975720.12	0.0071	0.0061
Mercury	3435-05-21 13:55 G	2975807.99	2975808.08	2975808.18	0.0071	0.0053
Mercury	3435-08-17 14:52 G	2975896.01	2975896.12	2975896.23	0.0071	0.0044
Mercury	3435-11-13 15:21 G	2975984.03	2975984.14	2975984.28	0.0071	0.0036
Mercury	3436-02-09 16:33 G	2976072.06	2976072.19	2976072.32	0.0072	0.0026
Mercury	3436-05-07 17:31 G	2976160.09	2976160.23	2976160.36	0.0072	0.0017
Mercury	3436-08-03 18:14 G	2976248.12	2976248.26	2976248.40	0.0072	0.0008
Mercury	3436-10-30 19:11 G	2976336.16	2976336.30	2976336.44	0.0072	0.0001

Mercury	3437-01-26 20:09 G	2976424.20	2976424.34	2976424.48	0.0072	0.0010
Mercury	3437-04-24 20:52 G	2976512.24	2976512.37	2976512.51	0.0072	0.0020
Mercury	3437-07-21 21:35 G	2976600.28	2976600.40	2976600.54	0.0072	0.0030
Mercury	3437-10-17 22:33 G	2976688.33	2976688.44	2976688.57	0.0072	0.0039
Mercury	3438-01-13 23:45 G	2976776.39	2976776.49	2976776.60	0.0073	0.0048
Mercury	3438-04-12 00:28 G	2976864.45	2976864.52	2976864.61	0.0073	0.0058
Mercury	3438-07-09 01:11 G	2976952.52	2976952.55	2976952.62	0.0073	0.0068
Moon	3507-08-02 00:57 G	3002177.42	3002177.54	3002177.70	0.0080	0.0068
Earth	3507-08-02 01:11 G	3002177.43	3002177.55	3002177.70	0.0080	0.0068 *
Venus	3512-05-21 02:52 G	3003931.43	3003931.62	3003931.85	0.0077	0.0025
Venus	3513-01-01 12:28 G	3004156.83	3004157.02	3004157.22	0.0077	0.0036
Mercury	3520-07-20 17:45 G	3006914.21	3006914.24	3006914.30	0.0073	0.0070
Mercury	3520-10-16 19:40 G	3007002.23	3007002.32	3007002.44	0.0072	0.0058
Mercury	3521-01-12 21:50 G	3007090.28	3007090.41	3007090.56	0.0072	0.0045
Mercury	3521-04-10 23:45 G	3007178.34	3007178.49	3007178.66	0.0072	0.0033
Mercury	3521-07-08 01:55 G	3007266.41	3007266.58	3007266.75	0.0072	0.0021
Mercury	3521-10-04 03:50 G	3007354.48	3007354.66	3007354.84	0.0072	0.0009
Mercury	3521-12-31 05:45 G	3007442.56	3007442.74	3007442.92	0.0072	0.0002
Mercury	3522-03-29 07:40 G	3007530.64	3007530.82	3007530.99	0.0072	0.0014
Mercury	3522-06-25 09:21 G	3007618.73	3007618.89	3007619.06	0.0072	0.0026
Mercury	3522-09-21 11:02 G	3007706.82	3007706.96	3007707.13	0.0071	0.0037
Mercury	3522-12-18 12:57 G	3007794.92	3007795.04	3007795.18	0.0071	0.0048
Mercury	3523-03-16 14:52 G	3007883.03	3007883.12	3007883.22	0.0071	0.0060
Mercury	3523-06-12 16:48 G	3007971.19	3007971.20	3007971.22	0.0071	0.0071
Earth	3668-02-02 11:45 G	3060801.75	3060801.99	3060802.24	0.0065	0.0016
Moon	3668-02-02 15:07 G	3060801.89	3060802.13	3060802.40	0.0065	0.0014 *
Mars	3672-09-09 15:21 G	3062482.84	3062483.14	3062483.48	0.0066	0.0021
Venus	3673-11-16 00:14 G	3062915.35	3062915.51	3062915.67	0.0067	0.0046
Venus	3674-06-29 05:16 G	3063140.50	3063140.72	3063140.94	0.0067	0.0007
Venus	3675-02-09 10:04 G	3063365.74	3063365.92	3063366.12	0.0067	0.0034

Mercury	3683-06-17 20:24 G	3066416.29	3066416.35	3066416.41	0.0071	0.0064
Mercury	3683-09-13 20:52 G	3066504.30	3066504.37	3066504.47	0.0071	0.0055
Mercury	3683-12-10 21:50 G	3066592.31	3066592.41	3066592.52	0.0071	0.0046
Mercury	3684-03-07 22:48 G	3066680.34	3066680.45	3066680.57	0.0071	0.0037
Mercury	3684-06-03 23:31 G	3066768.36	3066768.48	3066768.62	0.0072	0.0029
Mercury	3684-08-31 00:28 G	3066856.39	3066856.52	3066856.66	0.0072	0.0020
Mercury	3684-11-27 01:26 G	3066944.42	3066944.56	3066944.70	0.0072	0.0011
Mercury	3685-02-23 02:24 G	3067032.46	3067032.60	3067032.74	0.0072	0.0002
Mercury	3685-05-22 03:07 G	3067120.49	3067120.63	3067120.77	0.0072	0.0008
Mercury	3685-08-18 04:04 G	3067208.53	3067208.67	3067208.81	0.0072	0.0017
Mercury	3685-11-14 05:02 G	3067296.58	3067296.71	3067296.84	0.0072	0.0026
Mercury	3686-02-10 05:31 G	3067384.62	3067384.73	3067384.87	0.0072	0.0037
Mercury	3686-05-09 06:28 G	3067472.68	3067472.77	3067472.89	0.0073	0.0046
Mercury	3686-08-05 07:40 G	3067560.73	3067560.82	3067560.91	0.0073	0.0055
Mercury	3686-11-01 08:24 G	3067648.80	3067648.85	3067648.93	0.0073	0.0065
Moon	3756-08-04 21:21 G	3093127.20	3093127.39	3093127.61	0.0079	0.0052
Earth	3756-08-05 00:14 G	3093127.32	3093127.51	3093127.74	0.0079	0.0048 *
Venus	3760-12-05 09:21 G	3094710.68	3094710.89	3094711.12	0.0077	0.0017
Venus	3761-07-18 18:28 G	3094936.10	3094936.27	3094936.46	0.0076	0.0044
Mercury	3769-02-09 01:11 G	3097698.47	3097698.55	3097698.66	0.0072	0.0062
Mercury	3769-05-08 03:07 G	3097786.52	3097786.63	3097786.78	0.0072	0.0050
Mercury	3769-08-04 05:31 G	3097874.58	3097874.73	3097874.89	0.0072	0.0037
Mercury	3769-10-31 07:11 G	3097962.64	3097962.80	3097962.98	0.0072	0.0025
Mercury	3770-01-27 09:21 G	3098050.72	3098050.89	3098051.07	0.0072	0.0013
Mercury	3770-04-25 11:16 G	3098138.79	3098138.97	3098139.16	0.0072	0.0002
Mercury	3770-07-22 13:11 G	3098226.87	3098227.05	3098227.23	0.0072	0.0011
Mercury	3770-10-18 14:52 G	3098314.96	3098315.12	3098315.30	0.0072	0.0023
Mercury	3771-01-14 16:33 G	3098403.05	3098403.19	3098403.37	0.0072	0.0035
Mercury	3771-04-12 18:28 G	3098491.15	3098491.27	3098491.42	0.0071	0.0046
Mercury	3771-07-09 20:38 G	3098579.26	3098579.36	3098579.47	0.0071	0.0057

Mercury	3771-10-05 22:04 G	3098667.39	3098667.42	3098667.49	0.0071	0.0068
Moon	3916-02-06 09:35 G	3151384.67	3151384.90	3151385.14	0.0064	0.0024
Earth	3916-02-06 12:00 G	3151384.77	3151385.00	3151385.25	0.0064	0.0022 *
Mars	3920-12-20 01:11 G	3153163.23	3153163.55	3153163.90	0.0066	0.0009
Venus	3922-06-04 03:35 G	3153694.51	3153694.65	3153694.82	0.0067	0.0047
Venus	3923-01-15 09:07 G	3153919.66	3153919.88	3153920.10	0.0067	0.0007
Venus	3923-08-28 14:09 G	3154144.90	3154145.09	3154145.28	0.0067	0.0033
Mercury	3931-10-13 02:38 G	3157112.60	3157112.61	3157112.66	0.0071	0.0069
Mercury	3932-01-09 03:35 G	3157200.59	3157200.65	3157200.74	0.0071	0.0060
Mercury	3932-04-06 04:33 G	3157288.60	3157288.69	3157288.79	0.0071	0.0051
Mercury	3932-07-03 05:31 G	3157376.62	3157376.73	3157376.84	0.0071	0.0043
Mercury	3932-09-29 06:14 G	3157464.64	3157464.76	3157464.89	0.0071	0.0034
Mercury	3932-12-26 07:11 G	3157552.67	3157552.80	3157552.93	0.0072	0.0025
Mercury	3933-03-24 07:55 G	3157640.70	3157640.83	3157640.97	0.0072	0.0016
Mercury	3933-06-20 08:52 G	3157728.73	3157728.87	3157729.01	0.0072	0.0007
Mercury	3933-09-16 09:50 G	3157816.77	3157816.91	3157817.05	0.0072	0.0003
Mercury	3933-12-13 10:33 G	3157904.81	3157904.94	3157905.08	0.0072	0.0012
Mercury	3934-03-11 11:31 G	3157992.85	3157992.98	3157993.12	0.0072	0.0021
Mercury	3934-06-07 12:14 G	3158080.89	3158081.01	3158081.15	0.0072	0.0031
Mercury	3934-09-03 13:26 G	3158168.94	3158169.06	3158169.17	0.0072	0.0040
Mercury	3934-11-30 13:55 G	3158256.99	3158257.08	3158257.20	0.0073	0.0050
Mercury	3935-02-26 15:07 G	3158345.05	3158345.13	3158345.21	0.0073	0.0059
Mercury	3935-05-25 15:50 G	3158433.13	3158433.16	3158433.22	0.0073	0.0069

## 5TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 5th millennium CE.



PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Earth	4004-08-07 13:26	G	3183709.84	3183710.06	3183710.32	0.0079	0.0035	
Moon	4004-08-07 17:16	G	3183709.99	3183710.22	3183710.46	0.0079	0.0035	*
Venus	4009-06-22 12:57	G	3185489.83	3185490.04	3185490.26	0.0077	0.0019	
Venus	4010-02-02 21:50	G	3185715.24	3185715.41	3185715.61	0.0076	0.0042	
Mercury	4017-06-05 05:16	G	3188394.71	3188394.72	3188394.79	0.0073	0.0071	
Mercury	4017-09-01 07:40	G	3188482.72	3188482.82	3188482.94	0.0072	0.0058	
Mercury	4017-11-28 09:35	G	3188570.77	3188570.90	3188571.06	0.0072	0.0046	
Mercury	4018-02-24 11:45	G	3188658.84	3188658.99	3188659.16	0.0072	0.0033	
Mercury	4018-05-23 13:40	G	3188746.90	3188747.07	3188747.25	0.0072	0.0021	
Mercury	4018-08-19 15:50	G	3188834.98	3188835.16	3188835.34	0.0072	0.0009	
Mercury	4018-11-15 17:45	G	3188923.06	3188923.24	3188923.42	0.0072	0.0003	
Mercury	4019-02-11 19:26	G	3189011.14	3189011.31	3189011.50	0.0072	0.0015	
Mercury	4019-05-10 21:07	G	3189099.23	3189099.38	3189099.56	0.0072	0.0027	
Mercury	4019-08-06 23:16	G	3189187.32	3189187.47	3189187.63	0.0071	0.0038	
Mercury	4019-11-03 00:43	G	3189275.42	3189275.53	3189275.68	0.0071	0.0050	
Mercury	4020-01-30 02:52	G	3189363.54	3189363.62	3189363.72	0.0071	0.0060	
Earth	4164-02-08 12:28	G	3241967.93	3241968.02	3241968.16	0.0064	0.0057	
Moon	4164-02-08 14:09	G	3241967.99	3241968.09	3241968.26	0.0064	0.0056	*
Earth	4165-02-08 23:45	G	3242334.30	3242334.49	3242334.73	0.0065	0.0035	
Moon	4165-02-09 00:14	G	3242334.31	3242334.51	3242334.74	0.0065	0.0032	*
Mars	4169-03-29 13:40	G	3243843.78	3243844.07	3243844.37	0.0066	0.0033	
Venus	4170-12-19 08:09	G	3244473.68	3244473.84	3244474.00	0.0067	0.0046	
Venus	4171-08-01 13:11	G	3244698.83	3244699.05	3244699.27	0.0067	0.0007	
Venus	4172-03-13 18:14	G	3244924.07	3244924.26	3244924.45	0.0067	0.0034	
Mercury	4180-05-03 10:33	G	3247896.89	3247896.94	3247897.01	0.0071	0.0064	
Mercury	4180-07-30 11:31	G	3247984.90	3247984.98	3247985.07	0.0071	0.0055	

Mercury	4180-10-26 12:28 G	3248072.91	3248073.02	3248073.12	0.0071	0.0047
Mercury	4181-01-22 13:11 G	3248160.93	3248161.05	3248161.17	0.0071	0.0038
Mercury	4181-04-20 14:09 G	3248248.96	3248249.09	3248249.21	0.0072	0.0029
Mercury	4181-07-17 14:52 G	3248336.99	3248337.12	3248337.26	0.0072	0.0020
Mercury	4181-10-13 15:50 G	3248425.02	3248425.16	3248425.30	0.0072	0.0011
Mercury	4182-01-09 16:33 G	3248513.05	3248513.19	3248513.33	0.0072	0.0002
Mercury	4182-04-07 17:31 G	3248601.09	3248601.23	3248601.37	0.0072	0.0007
Mercury	4182-07-04 18:14 G	3248689.13	3248689.26	3248689.40	0.0072	0.0017
Mercury	4182-09-30 19:11 G	3248777.17	3248777.30	3248777.43	0.0072	0.0026
Mercury	4182-12-27 19:55 G	3248865.22	3248865.33	3248865.46	0.0072	0.0036
Mercury	4183-03-25 20:38 G	3248953.27	3248953.36	3248953.49	0.0073	0.0046
Mercury	4183-06-21 21:35 G	3249041.32	3249041.40	3249041.51	0.0073	0.0055
Mercury	4183-09-17 22:33 G	3249129.39	3249129.44	3249129.52	0.0073	0.0065
Earth	4253-08-12 09:50 G	3274659.85	3274659.91	3274660.05	0.0079	0.0073
Moon	4253-08-12 12:28 G	3274659.99	3274660.02	3274660.12	0.0079	0.0077 *
Mars	4256-10-17 19:11 G	3275822.25	3275822.30	3275822.41	0.0077	0.0075
Venus	4257-05-27 08:52 G	3276043.85	3276043.87	3276043.90	0.0077	0.0076
Venus	4258-01-07 18:14 G	3276269.05	3276269.26	3276269.48	0.0077	0.0015
Venus	4258-08-21 03:07 G	3276494.46	3276494.63	3276494.82	0.0076	0.0046
Mercury	4265-12-26 12:43 G	3279178.96	3279179.03	3279179.13	0.0072	0.0064
Mercury	4266-03-24 14:38 G	3279267.00	3279267.11	3279267.26	0.0072	0.0052
Mercury	4266-06-20 16:33 G	3279355.06	3279355.19	3279355.36	0.0072	0.0040
Mercury	4266-09-16 18:43 G	3279443.12	3279443.28	3279443.46	0.0072	0.0027
Mercury	4266-12-13 20:52 G	3279531.20	3279531.37	3279531.55	0.0072	0.0015
Mercury	4267-03-11 22:48 G	3279619.27	3279619.45	3279619.64	0.0072	0.0003
Mercury	4267-06-08 00:43 G	3279707.36	3279707.53	3279707.72	0.0072	0.0009
Mercury	4267-09-04 02:38 G	3279795.44	3279795.61	3279795.79	0.0072	0.0021
Mercury	4267-12-01 04:19 G	3279883.53	3279883.68	3279883.85	0.0072	0.0033
Mercury	4268-02-27 06:00 G	3279971.63	3279971.75	3279971.91	0.0071	0.0045
Mercury	4268-05-25 08:09 G	3280059.74	3280059.84	3280059.96	0.0071	0.0056

Mercury	4268-08-21 09:35 G	3280147.87	3280147.90	3280147.98	0.0071	0.0067
Moon	4413-02-11 20:09 G	3332917.09	3332917.34	3332917.61	0.0064	0.0011
Earth	4413-02-11 22:33 G	3332917.19	3332917.44	3332917.70	0.0064	0.0009 *
Venus	4419-07-06 10:19 G	3335252.81	3335252.93	3335253.09	0.0067	0.0051
Venus	4420-02-16 15:35 G	3335477.94	3335478.15	3335478.37	0.0067	0.0011
Venus	4420-09-28 20:24 G	3335703.17	3335703.35	3335703.56	0.0067	0.0030
Mercury	4428-11-23 17:31 G	3338681.18	3338681.23	3338681.31	0.0071	0.0063
Mercury	4429-02-19 18:28 G	3338769.19	3338769.27	3338769.37	0.0071	0.0054
Mercury	4429-05-18 19:26 G	3338857.21	3338857.31	3338857.42	0.0071	0.0045
Mercury	4429-08-14 20:09 G	3338945.23	3338945.34	3338945.47	0.0071	0.0037
Mercury	4429-11-10 21:07 G	3339033.26	3339033.38	3339033.51	0.0072	0.0028
Mercury	4430-02-06 21:50 G	3339121.28	3339121.41	3339121.55	0.0072	0.0019
Mercury	4430-05-05 22:48 G	3339209.32	3339209.45	3339209.59	0.0072	0.0010
Mercury	4430-08-01 23:45 G	3339297.35	3339297.49	3339297.63	0.0072	0.0000
Mercury	4430-10-29 00:28 G	3339385.39	3339385.52	3339385.66	0.0072	0.0009
Mercury	4431-01-25 01:26 G	3339473.43	3339473.56	3339473.70	0.0072	0.0018
Mercury	4431-04-23 02:24 G	3339561.47	3339561.60	3339561.73	0.0072	0.0028
Mercury	4431-07-20 03:07 G	3339649.52	3339649.63	3339649.76	0.0072	0.0037
Mercury	4431-10-16 04:04 G	3339737.57	3339737.67	3339737.78	0.0073	0.0047
Mercury	4432-01-12 04:48 G	3339825.62	3339825.70	3339825.80	0.0073	0.0056
Mercury	4432-04-09 05:45 G	3339913.69	3339913.74	3339913.81	0.0073	0.0066
Moon	4501-08-14 20:38 G	3365242.13	3365242.36	3365242.62	0.0079	0.0019
Earth	4501-08-14 21:35 G	3365242.15	3365242.40	3365242.66	0.0079	0.0018 *
Mars	4505-01-26 14:24 G	3366502.82	3366503.10	3366503.40	0.0078	0.0016
Venus	4506-07-25 20:24 G	3367048.14	3367048.35	3367048.57	0.0077	0.0022
Venus	4507-03-08 05:16 G	3367273.55	3367273.72	3367273.93	0.0076	0.0039
Mercury	4514-07-18 18:28 G	3369963.19	3369963.27	3369963.37	0.0072	0.0063
Mercury	4514-10-14 20:24 G	3370051.24	3370051.35	3370051.50	0.0072	0.0050
Mercury	4515-01-10 22:48 G	3370139.30	3370139.45	3370139.61	0.0072	0.0038
Mercury	4515-04-09 00:43 G	3370227.36	3370227.53	3370227.70	0.0072	0.0026

Mercury	4515-07-06 02:38 G	3370315.44	3370315.61	3370315.79	0.0072	0.0014
Mercury	4515-10-02 04:48 G	3370403.51	3370403.70	3370403.88	0.0072	0.0002
Mercury	4515-12-29 06:28 G	3370491.60	3370491.77	3370491.96	0.0072	0.0011
Mercury	4516-03-26 08:09 G	3370579.68	3370579.84	3370580.03	0.0072	0.0023
Mercury	4516-06-22 10:19 G	3370667.78	3370667.93	3370668.09	0.0072	0.0034
Mercury	4516-09-18 12:00 G	3370755.88	3370756.00	3370756.15	0.0071	0.0046
Mercury	4516-12-15 13:40 G	3370843.99	3370844.07	3370844.20	0.0071	0.0058
Mercury	4517-03-13 15:50 G	3370932.12	3370932.16	3370932.22	0.0071	0.0068
Earth	4661-02-14 21:50 G	3423500.26	3423500.41	3423500.59	0.0064	0.0049
Moon	4661-02-15 00:28 G	3423500.37	3423500.52	3423500.71	0.0064	0.0046 *
Moon	4662-02-16 05:02 G	3423866.53	3423866.71	3423866.93	0.0065	0.0040
Earth	4662-02-16 08:52 G	3423866.70	3423866.87	3423867.08	0.0065	0.0043 *
Venus	4668-01-21 13:40 G	3426031.95	3426032.07	3426032.22	0.0067	0.0053
Venus	4668-09-02 18:43 G	3426257.08	3426257.28	3426257.51	0.0067	0.0013
Venus	4669-04-15 23:45 G	3426482.30	3426482.49	3426482.70	0.0067	0.0028
Mercury	4677-03-20 00:00 G	3429377.49	3429377.50	3429377.55	0.0071	0.0069
Mercury	4677-06-16 00:57 G	3429465.48	3429465.54	3429465.63	0.0071	0.0060
Mercury	4677-09-12 01:55 G	3429553.49	3429553.58	3429553.68	0.0071	0.0051
Mercury	4677-12-09 02:38 G	3429641.51	3429641.61	3429641.73	0.0071	0.0043
Mercury	4678-03-07 03:35 G	3429729.53	3429729.65	3429729.78	0.0071	0.0034
Mercury	4678-06-03 04:19 G	3429817.56	3429817.68	3429817.82	0.0072	0.0025
Mercury	4678-08-30 05:16 G	3429905.59	3429905.72	3429905.86	0.0072	0.0016
Mercury	4678-11-26 06:14 G	3429993.62	3429993.76	3429993.90	0.0072	0.0006
Mercury	4679-02-22 07:11 G	3430081.66	3430081.80	3430081.94	0.0072	0.0003
Mercury	4679-05-21 07:55 G	3430169.69	3430169.83	3430169.97	0.0072	0.0012
Mercury	4679-08-17 08:52 G	3430257.74	3430257.87	3430258.00	0.0072	0.0021
Mercury	4679-11-13 09:21 G	3430345.78	3430345.89	3430346.03	0.0072	0.0032
Mercury	4680-02-09 10:19 G	3430433.83	3430433.93	3430434.06	0.0072	0.0041
Mercury	4680-05-07 11:31 G	3430521.88	3430521.98	3430522.08	0.0073	0.0050
Mercury	4680-08-03 12:00 G	3430609.94	3430610.00	3430610.10	0.0073	0.0060

Mercury	4680-10-30 12:57 G	3430698.02	3430698.04	3430698.10	0.0073	0.0070
Mars	4753-05-07 12:28 G	3457183.76	3457184.02	3457184.32	0.0078	0.0030
Venus	4755-02-10 00:14 G	3457827.31	3457827.51	3457827.73	0.0077	0.0022
Venus	4755-09-23 09:35 G	3458052.71	3458052.90	3458053.09	0.0076	0.0039
Mercury	4762-11-11 23:02 G	3460659.43	3460659.46	3460659.51	0.0073	0.0071
Mercury	4763-02-08 00:57 G	3460747.45	3460747.54	3460747.66	0.0072	0.0059
Mercury	4763-05-07 02:52 G	3460835.50	3460835.62	3460835.78	0.0072	0.0046
Mercury	4763-08-03 05:16 G	3460923.56	3460923.72	3460923.88	0.0072	0.0034
Mercury	4763-10-30 07:11 G	3461011.63	3461011.80	3461011.98	0.0072	0.0021
Mercury	4764-01-26 09:21 G	3461099.71	3461099.89	3461100.07	0.0072	0.0009
Mercury	4764-04-23 11:16 G	3461187.79	3461187.97	3461188.15	0.0072	0.0003
Mercury	4764-07-20 12:57 G	3461275.87	3461276.04	3461276.23	0.0072	0.0015
Mercury	4764-10-16 14:52 G	3461363.96	3461364.12	3461364.30	0.0072	0.0027
Mercury	4765-01-12 16:33 G	3461452.06	3461452.19	3461452.36	0.0071	0.0039
Mercury	4765-04-10 18:43 G	3461540.16	3461540.28	3461540.42	0.0071	0.0050
Mercury	4765-07-07 20:24 G	3461628.28	3461628.35	3461628.46	0.0071	0.0062
Earth	4910-02-19 06:00 G	3514449.50	3514449.75	3514450.01	0.0064	0.0005
Moon	4910-02-19 09:07 G	3514449.62	3514449.88	3514450.14	0.0064	0.0007 *
Venus	4916-08-07 14:38 G	3516811.05	3516811.11	3516811.24	0.0067	0.0061
Venus	4917-03-20 20:24 G	3517036.14	3517036.35	3517036.56	0.0067	0.0020
Venus	4917-11-01 01:11 G	3517261.36	3517261.55	3517261.78	0.0067	0.0021
Venus	4918-06-14 06:14 G	3517486.69	3517486.76	3517486.87	0.0068	0.0062
Mercury	4925-10-10 06:57 G	3520161.78	3520161.79	3520161.83	0.0071	0.0069
Mercury	4926-01-06 07:55 G	3520249.77	3520249.83	3520249.91	0.0071	0.0060
Mercury	4926-04-04 08:52 G	3520337.78	3520337.87	3520337.97	0.0071	0.0052
Mercury	4926-07-01 09:21 G	3520425.80	3520425.89	3520426.02	0.0071	0.0043
Mercury	4926-09-27 10:33 G	3520513.82	3520513.94	3520514.06	0.0071	0.0034
Mercury	4926-12-24 11:16 G	3520601.84	3520601.97	3520602.10	0.0072	0.0025
Mercury	4927-03-22 12:14 G	3520689.87	3520690.01	3520690.14	0.0072	0.0016
Mercury	4927-06-18 12:57 G	3520777.91	3520778.04	3520778.18	0.0072	0.0007

Mercury	4927-09-14 13:55 G	3520865.94	3520866.08	3520866.22	0.0072	0.0002
Mercury	4927-12-11 14:38 G	3520953.98	3520954.11	3520954.25	0.0072	0.0012
Mercury	4928-03-08 15:35 G	3521042.02	3521042.15	3521042.29	0.0072	0.0021
Mercury	4928-06-04 16:19 G	3521130.06	3521130.18	3521130.31	0.0072	0.0031
Mercury	4928-08-31 17:02 G	3521218.11	3521218.21	3521218.34	0.0072	0.0041
Mercury	4928-11-27 18:00 G	3521306.16	3521306.25	3521306.36	0.0073	0.0050
Mercury	4929-02-23 18:43 G	3521394.22	3521394.28	3521394.38	0.0073	0.0060
Mercury	4929-05-22 19:55 G	3521482.30	3521482.33	3521482.38	0.0073	0.0069
Moon	4998-08-20 21:50 G	3546774.16	3546774.41	3546774.68	0.0079	0.0019
Earth	4998-08-21 01:11 G	3546774.30	3546774.55	3546774.82	0.0079	0.0018 *

# 6TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 6th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	5003-08-28 01:11 G		3548606.37	3548606.55	3548606.77	0.0077	0.0033	
Venus	5004-04-09 10:33 G		3548831.74	3548831.94	3548832.15	0.0076	0.0029	
Mercury	5011-06-04 04:19 G		3551443.67	3551443.68	3551443.71	0.0073	0.0072	
Mercury	5011-08-31 06:00 G		3551531.67	3551531.75	3551531.88	0.0072	0.0060	
Mercury	5011-11-27 08:24 G		3551619.72	3551619.85	3551620.00	0.0072	0.0047	
Mercury	5012-02-23 10:19 G		3551707.78	3551707.93	3551708.10	0.0072	0.0035	
Mercury	5012-05-21 12:28 G		3551795.85	3551796.02	3551796.20	0.0072	0.0022	
Mercury	5012-08-17 14:24 G		3551883.93	3551884.10	3551884.29	0.0072	0.0010	

Mercury	5012-11-13 16:33 G	3551972.01	3551972.19	3551972.37	0.0072	0.0002
Mercury	5013-02-09 18:14 G	3552060.09	3552060.26	3552060.45	0.0072	0.0015
Mercury	5013-05-08 20:24 G	3552148.18	3552148.35	3552148.52	0.0072	0.0026
Mercury	5013-08-04 22:19 G	3552236.28	3552236.43	3552236.59	0.0072	0.0038
Mercury	5013-11-01 00:00 G	3552324.38	3552324.50	3552324.64	0.0071	0.0050
Mercury	5014-01-28 01:40 G	3552412.50	3552412.57	3552412.68	0.0071	0.0062
Moon	5158-02-22 01:55 G	3605032.44	3605032.58	3605032.79	0.0064	0.0045
Earth	5158-02-22 04:33 G	3605032.54	3605032.69	3605032.88	0.0064	0.0047 *
Moon	5159-02-23 15:21 G	3605398.96	3605399.14	3605399.37	0.0064	0.0041
Earth	5159-02-23 15:35 G	3605398.98	3605399.15	3605399.36	0.0064	0.0044 *
Venus	5165-02-22 17:45 G	3607590.20	3607590.24	3607590.32	0.0067	0.0064
Venus	5165-10-05 22:48 G	3607815.26	3607815.45	3607815.67	0.0067	0.0024
Venus	5166-05-19 04:19 G	3608040.47	3608040.68	3608040.89	0.0067	0.0017
Venus	5166-12-30 08:52 G	3608265.79	3608265.87	3608266.01	0.0068	0.0059
Mercury	5174-05-02 14:09 G	3610946.06	3610946.09	3610946.15	0.0071	0.0067
Mercury	5174-07-29 15:07 G	3611034.06	3611034.13	3611034.22	0.0071	0.0058
Mercury	5174-10-25 16:04 G	3611122.07	3611122.17	3611122.27	0.0071	0.0050
Mercury	5175-01-21 17:02 G	3611210.09	3611210.21	3611210.32	0.0071	0.0041
Mercury	5175-04-19 17:45 G	3611298.12	3611298.24	3611298.36	0.0071	0.0032
Mercury	5175-07-16 18:28 G	3611386.14	3611386.27	3611386.40	0.0072	0.0023
Mercury	5175-10-12 19:26 G	3611474.17	3611474.31	3611474.44	0.0072	0.0014
Mercury	5176-01-08 20:09 G	3611562.20	3611562.34	3611562.48	0.0072	0.0005
Mercury	5176-04-05 21:07 G	3611650.24	3611650.38	3611650.52	0.0072	0.0005
Mercury	5176-07-02 21:50 G	3611738.28	3611738.41	3611738.55	0.0072	0.0014
Mercury	5176-09-28 22:48 G	3611826.32	3611826.45	3611826.58	0.0072	0.0023
Mercury	5176-12-25 23:45 G	3611914.36	3611914.49	3611914.61	0.0072	0.0033
Mercury	5177-03-24 00:14 G	3612002.41	3612002.51	3612002.64	0.0072	0.0043
Mercury	5177-06-20 01:26 G	3612090.46	3612090.56	3612090.66	0.0073	0.0052
Mercury	5177-09-16 01:55 G	3612178.53	3612178.58	3612178.67	0.0073	0.0062
Mercury	5177-12-13 03:21 G	3612266.61	3612266.64	3612266.66	0.0073	0.0071

Moon	5247-08-25 16:04 G	3637724.15	3637724.17	3637724.21	0.0079	0.0079
Earth	5247-08-25 18:00 G	3637724.20	3637724.25	3637724.37	0.0079	0.0076 *
Venus	5252-03-13 04:19 G	3639385.50	3639385.68	3639385.89	0.0077	0.0036
Venus	5252-10-24 13:40 G	3639610.87	3639611.07	3639611.28	0.0076	0.0026
Mercury	5259-12-24 10:04 G	3642227.89	3642227.92	3642228.00	0.0073	0.0070
Mercury	5260-03-21 12:28 G	3642315.92	3642316.02	3642316.14	0.0072	0.0057
Mercury	5260-06-17 14:24 G	3642403.97	3642404.10	3642404.26	0.0072	0.0044
Mercury	5260-09-13 16:48 G	3642492.03	3642492.20	3642492.36	0.0072	0.0032
Mercury	5260-12-10 18:43 G	3642580.11	3642580.28	3642580.46	0.0072	0.0019
Mercury	5261-03-08 20:38 G	3642668.18	3642668.36	3642668.55	0.0072	0.0007
Mercury	5261-06-04 22:48 G	3642756.26	3642756.45	3642756.63	0.0072	0.0005
Mercury	5261-09-01 00:43 G	3642844.35	3642844.53	3642844.71	0.0072	0.0017
Mercury	5261-11-28 02:24 G	3642932.44	3642932.60	3642932.78	0.0072	0.0029
Mercury	5262-02-24 04:19 G	3643020.54	3643020.68	3643020.84	0.0071	0.0041
Mercury	5262-05-23 06:00 G	3643108.65	3643108.75	3643108.89	0.0071	0.0053
Mercury	5262-08-19 07:55 G	3643196.77	3643196.83	3643196.93	0.0071	0.0064
Earth	5407-02-26 12:28 G	3695981.77	3695982.02	3695982.28	0.0064	0.0005
Moon	5407-02-26 13:40 G	3695981.83	3695982.07	3695982.33	0.0064	0.0007 *
Venus	5414-04-23 00:00 G	3698594.33	3698594.50	3698594.71	0.0067	0.0032
Venus	5414-12-04 05:31 G	3698819.52	3698819.73	3698819.95	0.0067	0.0009
Venus	5415-07-17 10:19 G	3699044.81	3699044.93	3699045.10	0.0068	0.0051
Mercury	5422-11-22 20:52 G	3701730.35	3701730.37	3701730.42	0.0071	0.0068
Mercury	5423-02-18 21:50 G	3701818.35	3701818.41	3701818.49	0.0071	0.0059
Mercury	5423-05-17 22:48 G	3701906.36	3701906.45	3701906.55	0.0071	0.0050
Mercury	5423-08-13 23:31 G	3701994.38	3701994.48	3701994.60	0.0071	0.0042
Mercury	5423-11-10 00:28 G	3702082.40	3702082.52	3702082.64	0.0071	0.0033
Mercury	5424-02-06 01:11 G	3702170.42	3702170.55	3702170.68	0.0072	0.0024
Mercury	5424-05-04 02:09 G	3702258.45	3702258.59	3702258.72	0.0072	0.0015
Mercury	5424-07-31 02:52 G	3702346.49	3702346.62	3702346.76	0.0072	0.0006
Mercury	5424-10-27 03:50 G	3702434.52	3702434.66	3702434.80	0.0072	0.0004



Mercury	5425-01-23 04:33 G	3702522.56	3702522.69	3702522.83	0.0072	0.0013
Mercury	5425-04-21 05:31 G	3702610.60	3702610.73	3702610.86	0.0072	0.0022
Mercury	5425-07-18 06:00 G	3702698.64	3702698.75	3702698.89	0.0072	0.0033
Mercury	5425-10-14 06:57 G	3702786.69	3702786.79	3702786.92	0.0072	0.0042
Mercury	5426-01-10 08:09 G	3702874.74	3702874.84	3702874.94	0.0072	0.0051
Mercury	5426-04-08 08:52 G	3702962.80	3702962.87	3702962.95	0.0073	0.0061
Mercury	5426-07-05 09:35 G	3703050.88	3703050.90	3703050.95	0.0073	0.0071
Earth	5495-08-28 03:07 G	3728306.39	3728306.63	3728306.89	0.0080	0.0025
Moon	5495-08-28 04:33 G	3728306.44	3728306.69	3728306.95	0.0080	0.0026 *
Venus	5500-09-29 05:16 G	3730164.57	3730164.72	3730164.92	0.0077	0.0047
Venus	5501-05-12 14:38 G	3730389.91	3730390.11	3730390.34	0.0076	0.0016
Venus	5501-12-23 23:45 G	3730615.47	3730615.49	3730615.52	0.0076	0.0075
Mercury	5508-07-16 15:21 G	3733012.12	3733012.14	3733012.21	0.0073	0.0071
Mercury	5508-10-12 17:45 G	3733100.14	3733100.24	3733100.36	0.0072	0.0058
Mercury	5509-01-08 19:40 G	3733188.19	3733188.32	3733188.48	0.0072	0.0045
Mercury	5509-04-06 21:50 G	3733276.26	3733276.41	3733276.58	0.0072	0.0033
Mercury	5509-07-04 00:00 G	3733364.33	3733364.50	3733364.68	0.0072	0.0020
Mercury	5509-09-30 01:55 G	3733452.40	3733452.58	3733452.77	0.0072	0.0008
Mercury	5509-12-27 04:04 G	3733540.49	3733540.67	3733540.85	0.0072	0.0004
Mercury	5510-03-25 05:45 G	3733628.57	3733628.74	3733628.93	0.0072	0.0017
Mercury	5510-06-21 07:40 G	3733716.66	3733716.82	3733717.00	0.0072	0.0029
Mercury	5510-09-17 09:21 G	3733804.76	3733804.89	3733805.06	0.0072	0.0041
Mercury	5510-12-14 11:45 G	3733892.87	3733892.99	3733893.12	0.0071	0.0052
Mercury	5511-03-12 13:26 G	3733980.99	3733981.06	3733981.15	0.0071	0.0064
Moon	5655-02-28 08:38 G	3786564.68	3786564.86	3786565.07	0.0064	0.0043
Earth	5655-02-28 11:02 G	3786564.81	3786564.96	3786565.17	0.0064	0.0046 *
Earth	5656-02-29 22:48 G	3786931.27	3786931.45	3786931.64	0.0064	0.0045
Moon	5656-03-01 01:55 G	3786931.41	3786931.58	3786931.79	0.0064	0.0042 *
Mars	5660-10-12 07:26 G	3788617.59	3788617.81	3788618.10	0.0066	0.0044
Venus	5662-11-07 03:07 G	3789373.46	3789373.63	3789373.84	0.0067	0.0034

Venus	5663-06-20 08:38 G	3789598.65	3789598.86	3789599.08	0.0067	0.0007
Venus	5664-01-31 13:26 G	3789823.93	3789824.06	3789824.24	0.0068	0.0049
Mercury	5671-06-14 04:33 G	3792514.64	3792514.69	3792514.74	0.0071	0.0065
Mercury	5671-09-10 05:02 G	3792602.64	3792602.71	3792602.81	0.0071	0.0057
Mercury	5671-12-07 06:00 G	3792690.66	3792690.75	3792690.86	0.0071	0.0048
Mercury	5672-03-04 06:43 G	3792778.68	3792778.78	3792778.91	0.0071	0.0039
Mercury	5672-05-31 07:40 G	3792866.70	3792866.82	3792866.95	0.0071	0.0030
Mercury	5672-08-27 08:38 G	3792954.73	3792954.86	3792954.99	0.0072	0.0021
Mercury	5672-11-23 09:21 G	3793042.76	3793042.89	3793043.03	0.0072	0.0012
Mercury	5673-02-19 10:19 G	3793130.79	3793130.93	3793131.07	0.0072	0.0003
Mercury	5673-05-18 11:02 G	3793218.83	3793218.96	3793219.10	0.0072	0.0007
Mercury	5673-08-14 11:45 G	3793306.86	3793306.99	3793307.14	0.0072	0.0017
Mercury	5673-11-10 12:43 G	3793394.90	3793395.03	3793395.16	0.0072	0.0025
Mercury	5674-02-06 13:40 G	3793482.95	3793483.07	3793483.19	0.0072	0.0035
Mercury	5674-05-05 14:24 G	3793571.00	3793571.10	3793571.22	0.0072	0.0044
Mercury	5674-08-01 15:21 G	3793659.05	3793659.14	3793659.24	0.0073	0.0054
Mercury	5674-10-28 16:04 G	3793747.12	3793747.17	3793747.25	0.0073	0.0064
Moon	5744-08-31 18:28 G	3819256.18	3819256.27	3819256.40	0.0079	0.0073
Earth	5744-08-31 20:52 G	3819256.27	3819256.37	3819256.52	0.0079	0.0070 *
Venus	5749-04-15 08:52 G	3820943.71	3820943.87	3820944.05	0.0077	0.0048
Venus	5749-11-26 18:14 G	3821169.04	3821169.26	3821169.48	0.0076	0.0014
Venus	5750-07-10 02:52 G	3821394.59	3821394.62	3821394.69	0.0076	0.0074
Mercury	5757-02-04 21:35 G	3823796.35	3823796.40	3823796.49	0.0073	0.0068
Mercury	5757-05-03 23:45 G	3823884.39	3823884.49	3823884.63	0.0072	0.0055
Mercury	5757-07-31 02:09 G	3823972.44	3823972.59	3823972.74	0.0072	0.0042
Mercury	5757-10-27 04:04 G	3824060.51	3824060.67	3824060.84	0.0072	0.0029
Mercury	5758-01-23 06:00 G	3824148.58	3824148.75	3824148.94	0.0072	0.0017
Mercury	5758-04-21 08:09 G	3824236.66	3824236.84	3824237.03	0.0072	0.0005
Mercury	5758-07-18 10:04 G	3824324.74	3824324.92	3824325.11	0.0072	0.0008
Mercury	5758-10-14 12:00 G	3824412.83	3824413.00	3824413.18	0.0072	0.0020

Mercury	5759-01-10 13:55 G	3824500.93	3824501.08	3824501.25	0.0072	0.0032
Mercury	5759-04-08 15:50 G	3824589.03	3824589.16	3824589.32	0.0071	0.0044
Mercury	5759-07-05 17:31 G	3824677.14	3824677.23	3824677.37	0.0071	0.0056
Mercury	5759-10-01 19:26 G	3824765.27	3824765.31	3824765.39	0.0071	0.0067
Moon	5904-03-04 17:31 G	3877513.97	3877514.23	3877514.48	0.0064	0.0002
Earth	5904-03-04 20:52 G	3877514.11	3877514.37	3877514.62	0.0064	0.0001 *
Mars	5909-01-21 14:24 G	3879297.77	3879298.10	3879298.44	0.0066	0.0004
Venus	5911-05-26 05:02 G	3880152.56	3880152.71	3880152.92	0.0067	0.0039
Venus	5912-01-06 10:48 G	3880377.73	3880377.95	3880378.17	0.0067	0.0003
Venus	5912-08-18 15:50 G	3880603.00	3880603.16	3880603.34	0.0068	0.0044
Mercury	5920-01-05 11:16 G	3883298.93	3883298.97	3883299.04	0.0071	0.0065
Mercury	5920-04-02 12:00 G	3883386.93	3883387.00	3883387.10	0.0071	0.0057
Mercury	5920-06-29 12:57 G	3883474.95	3883475.04	3883475.15	0.0071	0.0047
Mercury	5920-09-25 13:55 G	3883562.97	3883563.08	3883563.20	0.0071	0.0038
Mercury	5920-12-22 14:38 G	3883650.99	3883651.11	3883651.24	0.0071	0.0030
Mercury	5921-03-20 15:35 G	3883739.02	3883739.15	3883739.28	0.0072	0.0020
Mercury	5921-06-16 16:19 G	3883827.05	3883827.18	3883827.32	0.0072	0.0012
Mercury	5921-09-12 17:16 G	3883915.08	3883915.22	3883915.36	0.0072	0.0002
Mercury	5921-12-09 18:00 G	3884003.12	3884003.25	3884003.39	0.0072	0.0008
Mercury	5922-03-07 18:43 G	3884091.16	3884091.28	3884091.43	0.0072	0.0017
Mercury	5922-06-03 19:40 G	3884179.20	3884179.32	3884179.46	0.0072	0.0026
Mercury	5922-08-30 20:38 G	3884267.24	3884267.36	3884267.48	0.0072	0.0036
Mercury	5922-11-26 21:21 G	3884355.29	3884355.39	3884355.51	0.0072	0.0045
Mercury	5923-02-22 22:19 G	3884443.34	3884443.43	3884443.52	0.0073	0.0055
Mercury	5923-05-21 23:02 G	3884531.41	3884531.46	3884531.53	0.0073	0.0065
Earth	5992-09-03 07:55 G	3909838.58	3909838.83	3909839.09	0.0080	0.0022
Moon	5992-09-03 11:16 G	3909838.73	3909838.97	3909839.22	0.0080	0.0024 *
Venus	5997-10-31 11:02 G	3911722.82	3911722.96	3911723.13	0.0077	0.0054
Venus	5998-06-13 20:24 G	3911948.14	3911948.35	3911948.58	0.0076	0.0009
Venus	5999-01-25 05:02 G	3912173.64	3912173.71	3912173.83	0.0076	0.0069

# 7TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 7th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	6005-08-28 03:35	G	3914580.59	3914580.65	3914580.74	0.0073	0.0066	
Mercury	6005-11-24 06:00	G	3914668.63	3914668.75	3914668.87	0.0072	0.0053	
Mercury	6006-02-20 07:40	G	3914756.68	3914756.82	3914756.99	0.0072	0.0041	
Mercury	6006-05-19 10:04	G	3914844.75	3914844.92	3914845.09	0.0072	0.0028	
Mercury	6006-08-15 12:00	G	3914932.83	3914933.00	3914933.18	0.0072	0.0015	
Mercury	6006-11-11 14:09	G	3915020.90	3915021.09	3915021.27	0.0072	0.0003	
Mercury	6007-02-07 15:50	G	3915108.99	3915109.16	3915109.35	0.0072	0.0010	
Mercury	6007-05-06 17:45	G	3915197.08	3915197.24	3915197.43	0.0072	0.0022	
Mercury	6007-08-02 19:40	G	3915285.17	3915285.32	3915285.50	0.0072	0.0034	
Mercury	6007-10-29 21:35	G	3915373.28	3915373.40	3915373.56	0.0072	0.0046	
Mercury	6008-01-25 23:31	G	3915461.39	3915461.48	3915461.60	0.0071	0.0058	
Mercury	6008-04-23 01:11	G	3915549.53	3915549.55	3915549.62	0.0071	0.0070	
Earth	6152-03-06 21:07	G	3968097.19	3968097.38	3968097.61	0.0064	0.0035	
Moon	6152-03-06 23:31	G	3968097.28	3968097.48	3968097.73	0.0064	0.0032	*
Moon	6153-03-08 07:55	G	3968463.70	3968463.83	3968463.98	0.0064	0.0053	
Earth	6153-03-08 08:24	G	3968463.74	3968463.85	3968464.00	0.0064	0.0056	*
Mars	6157-05-01 05:02	G	3969978.39	3969978.71	3969979.03	0.0066	0.0017	
Venus	6159-12-10 09:50	G	3970931.74	3970931.91	3970932.11	0.0067	0.0036	

Venus	6160-07-22 15:21 G	3971156.92	3971157.14	3971157.36	0.0067	0.0005
Venus	6161-03-04 20:24 G	3971382.20	3971382.35	3971382.51	0.0068	0.0047
Mercury	6168-04-29 18:28 G	3973995.24	3973995.27	3973995.31	0.0071	0.0068
Mercury	6168-07-26 18:57 G	3974083.24	3974083.29	3974083.38	0.0071	0.0060
Mercury	6168-10-22 19:55 G	3974171.25	3974171.33	3974171.44	0.0071	0.0051
Mercury	6169-01-18 20:38 G	3974259.26	3974259.36	3974259.49	0.0071	0.0043
Mercury	6169-04-16 21:35 G	3974347.29	3974347.40	3974347.53	0.0071	0.0033
Mercury	6169-07-13 22:19 G	3974435.31	3974435.43	3974435.57	0.0071	0.0025
Mercury	6169-10-09 23:31 G	3974523.34	3974523.48	3974523.61	0.0072	0.0015
Mercury	6170-01-06 00:14 G	3974611.37	3974611.51	3974611.65	0.0072	0.0006
Mercury	6170-04-04 01:11 G	3974699.41	3974699.55	3974699.68	0.0072	0.0004
Mercury	6170-07-01 01:55 G	3974787.44	3974787.58	3974787.72	0.0072	0.0013
Mercury	6170-09-27 02:38 G	3974875.48	3974875.61	3974875.75	0.0072	0.0022
Mercury	6170-12-24 03:35 G	3974963.53	3974963.65	3974963.78	0.0072	0.0032
Mercury	6171-03-22 04:19 G	3975051.57	3975051.68	3975051.80	0.0072	0.0041
Mercury	6171-06-18 05:16 G	3975139.63	3975139.72	3975139.82	0.0072	0.0051
Mercury	6171-09-14 06:00 G	3975227.69	3975227.75	3975227.83	0.0073	0.0061
Mercury	6171-12-11 06:43 G	3975315.76	3975315.78	3975315.83	0.0073	0.0071
Venus	6246-05-18 16:04 G	4002502.02	4002502.17	4002502.36	0.0077	0.0049
Venus	6246-12-30 01:26 G	4002727.35	4002727.56	4002727.79	0.0076	0.0013
Venus	6247-08-12 10:04 G	4002952.89	4002952.92	4002953.00	0.0076	0.0074
Mercury	6253-12-22 08:24 G	4005276.84	4005276.85	4005276.89	0.0073	0.0072
Mercury	6254-03-20 10:48 G	4005364.85	4005364.95	4005365.06	0.0073	0.0059
Mercury	6254-06-16 12:28 G	4005452.90	4005453.02	4005453.18	0.0072	0.0047
Mercury	6254-09-12 14:52 G	4005540.96	4005541.12	4005541.29	0.0072	0.0034
Mercury	6254-12-09 16:48 G	4005629.03	4005629.20	4005629.38	0.0072	0.0021
Mercury	6255-03-07 18:57 G	4005717.11	4005717.29	4005717.48	0.0072	0.0009
Mercury	6255-06-03 20:52 G	4005805.19	4005805.37	4005805.56	0.0072	0.0004
Mercury	6255-08-30 22:48 G	4005893.28	4005893.45	4005893.64	0.0072	0.0016
Mercury	6255-11-27 00:57 G	4005981.37	4005981.54	4005981.71	0.0072	0.0028

Mercury	6256-02-23 02:52 G	4006069.47	4006069.62	4006069.77	0.0072	0.0040
Mercury	6256-05-21 04:48 G	4006157.58	4006157.70	4006157.83	0.0071	0.0052
Mercury	6256-08-17 06:43 G	4006245.70	4006245.78	4006245.86	0.0071	0.0064
Moon	6401-03-11 08:24 G	4059046.62	4059046.85	4059047.12	0.0064	0.0018
Earth	6401-03-11 08:52 G	4059046.65	4059046.87	4059047.14	0.0064	0.0020 *
Mars	6405-08-09 18:43 G	4060659.02	4060659.28	4060659.55	0.0066	0.0039
Venus	6408-06-26 13:55 G	4061710.90	4061711.08	4061711.28	0.0067	0.0034
Venus	6409-02-06 19:11 G	4061936.09	4061936.30	4061936.53	0.0067	0.0007
Venus	6409-09-20 00:14 G	4062161.37	4062161.51	4062161.67	0.0068	0.0049
Mercury	6416-11-20 01:55 G	4064779.54	4064779.58	4064779.65	0.0071	0.0064
Mercury	6417-02-16 02:52 G	4064867.54	4064867.62	4064867.71	0.0071	0.0055
Mercury	6417-05-15 03:50 G	4064955.56	4064955.66	4064955.76	0.0071	0.0046
Mercury	6417-08-11 04:33 G	4065043.58	4065043.69	4065043.81	0.0071	0.0038
Mercury	6417-11-07 05:16 G	4065131.60	4065131.72	4065131.85	0.0071	0.0029
Mercury	6418-02-03 06:14 G	4065219.63	4065219.76	4065219.89	0.0072	0.0020
Mercury	6418-05-02 06:57 G	4065307.66	4065307.79	4065307.93	0.0072	0.0011
Mercury	6418-07-29 07:55 G	4065395.69	4065395.83	4065395.97	0.0072	0.0002
Mercury	6418-10-25 08:38 G	4065483.72	4065483.86	4065484.00	0.0072	0.0008
Mercury	6419-01-21 09:35 G	4065571.76	4065571.90	4065572.03	0.0072	0.0017
Mercury	6419-04-19 10:04 G	4065659.80	4065659.92	4065660.06	0.0072	0.0028
Mercury	6419-07-16 11:02 G	4065747.85	4065747.96	4065748.09	0.0072	0.0036
Mercury	6419-10-12 11:45 G	4065835.90	4065835.99	4065836.11	0.0072	0.0046
Mercury	6420-01-08 12:43 G	4065923.95	4065924.03	4065924.13	0.0073	0.0056
Mercury	6420-04-05 13:26 G	4066012.02	4066012.06	4066012.13	0.0073	0.0066
Moon	6489-09-09 18:28 G	4091371.02	4091371.27	4091371.53	0.0080	0.0008
Earth	6489-09-09 20:09 G	4091371.09	4091371.34	4091371.61	0.0080	0.0010 *
Mars	6493-03-03 17:16 G	4092641.98	4092642.22	4092642.47	0.0078	0.0046
Venus	6494-12-02 21:07 G	4093281.21	4093281.38	4093281.57	0.0077	0.0044
Venus	6495-07-16 06:14 G	4093506.56	4093506.76	4093506.99	0.0076	0.0019
Mercury	6502-07-14 15:35 G	4096061.07	4096061.15	4096061.24	0.0073	0.0065

Mercury	6502-10-10 17:16 G	4096149.11	4096149.22	4096149.37	0.0073	0.0053
Mercury	6503-01-06 19:40 G	4096237.17	4096237.32	4096237.48	0.0072	0.0039
Mercury	6503-04-04 21:50 G	4096325.24	4096325.41	4096325.59	0.0072	0.0027
Mercury	6503-07-01 23:45 G	4096413.32	4096413.49	4096413.68	0.0072	0.0015
Mercury	6503-09-28 01:55 G	4096501.40	4096501.58	4096501.77	0.0072	0.0002
Mercury	6503-12-25 03:50 G	4096589.49	4096589.66	4096589.85	0.0072	0.0011
Mercury	6504-03-22 05:45 G	4096677.58	4096677.74	4096677.92	0.0072	0.0023
Mercury	6504-06-18 07:55 G	4096765.67	4096765.83	4096765.99	0.0072	0.0035
Mercury	6504-09-14 09:50 G	4096853.78	4096853.91	4096854.05	0.0072	0.0047
Mercury	6504-12-11 11:45 G	4096941.89	4096941.99	4096942.10	0.0071	0.0059
Mercury	6505-03-09 13:40 G	4097030.06	4097030.07	4097030.10	0.0071	0.0071
Earth	6649-03-14 13:26 G	4149629.80	4149630.06	4149630.31	0.0064	0.0007
Moon	6649-03-14 15:35 G	4149629.90	4149630.15	4149630.40	0.0064	0.0004 *
Mars	6653-11-18 15:50 G	4151339.94	4151340.16	4151340.45	0.0066	0.0042
Venus	6656-05-31 15:07 G	4152265.10	4152265.13	4152265.20	0.0067	0.0065
Venus	6657-01-11 20:24 G	4152490.16	4152490.35	4152490.57	0.0067	0.0025
Venus	6657-08-25 01:55 G	4152715.37	4152715.58	4152715.80	0.0068	0.0018
Venus	6658-04-07 06:57 G	4152940.70	4152940.79	4152940.90	0.0068	0.0060
Mercury	6665-03-16 09:35 G	4155475.86	4155475.90	4155475.97	0.0071	0.0064
Mercury	6665-06-12 10:33 G	4155563.86	4155563.94	4155564.03	0.0071	0.0055
Mercury	6665-09-08 11:16 G	4155651.88	4155651.97	4155652.08	0.0071	0.0046
Mercury	6665-12-05 12:14 G	4155739.90	4155740.01	4155740.13	0.0071	0.0037
Mercury	6666-03-03 12:57 G	4155827.92	4155828.04	4155828.17	0.0071	0.0028
Mercury	6666-05-30 13:40 G	4155915.95	4155916.07	4155916.21	0.0072	0.0020
Mercury	6666-08-26 14:38 G	4156003.98	4156004.11	4156004.25	0.0072	0.0010
Mercury	6666-11-22 15:35 G	4156092.01	4156092.15	4156092.29	0.0072	0.0001
Mercury	6667-02-18 16:19 G	4156180.05	4156180.18	4156180.32	0.0072	0.0009
Mercury	6667-05-17 17:02 G	4156268.08	4156268.21	4156268.35	0.0072	0.0018
Mercury	6667-08-13 18:00 G	4156356.12	4156356.25	4156356.38	0.0072	0.0027
Mercury	6667-11-09 18:57 G	4156444.17	4156444.29	4156444.41	0.0072	0.0037

Mercury	6668-02-05 19:40 G	4156532.22	4156532.32	4156532.43	0.0072	0.0046
Mercury	6668-05-03 20:09 G	4156620.27	4156620.34	4156620.45	0.0073	0.0057
Mercury	6668-07-30 21:21 G	4156708.34	4156708.39	4156708.45	0.0073	0.0066
Moon	6737-09-13 16:48 G	4181954.00	4181954.20	4181954.44	0.0080	0.0047
Earth	6737-09-13 17:31 G	4181954.02	4181954.23	4181954.46	0.0080	0.0044 *
Mars	6741-06-14 01:55 G	4183323.33	4183323.58	4183323.85	0.0078	0.0039
Venus	6743-06-21 05:16 G	4184060.52	4184060.72	4184060.94	0.0077	0.0028
Venus	6744-02-01 14:24 G	4184285.91	4184286.10	4184286.31	0.0076	0.0034
Mercury	6750-11-07 21:07 G	4186757.33	4186757.38	4186757.49	0.0073	0.0066
Mercury	6751-02-03 23:31 G	4186845.37	4186845.48	4186845.62	0.0073	0.0053
Mercury	6751-05-03 01:40 G	4186933.43	4186933.57	4186933.74	0.0072	0.0040
Mercury	6751-07-30 04:04 G	4187021.50	4187021.67	4187021.84	0.0072	0.0027
Mercury	6751-10-26 06:00 G	4187109.57	4187109.75	4187109.93	0.0072	0.0014
Mercury	6752-01-22 08:09 G	4187197.65	4187197.84	4187198.02	0.0072	0.0002
Mercury	6752-04-19 10:04 G	4187285.74	4187285.92	4187286.10	0.0072	0.0011
Mercury	6752-07-16 12:00 G	4187373.83	4187374.00	4187374.18	0.0072	0.0023
Mercury	6752-10-12 14:09 G	4187461.93	4187462.09	4187462.25	0.0072	0.0035
Mercury	6753-01-08 15:35 G	4187550.03	4187550.15	4187550.31	0.0072	0.0048
Mercury	6753-04-06 17:31 G	4187638.15	4187638.23	4187638.35	0.0071	0.0060
Mercury	6753-07-03 19:55 G	4187726.32	4187726.33	4187726.35	0.0071	0.0071
Moon	6897-03-16 14:23 G	4240212.89	4240213.10	4240213.35	0.0064	0.0031
Earth	6897-03-16 17:02 G	4240213.02	4240213.21	4240213.46	0.0064	0.0032 *
Earth	6898-03-18 04:19 G	4240579.60	4240579.68	4240579.81	0.0064	0.0059
Moon	6898-03-18 08:09 G	4240579.74	4240579.84	4240579.97	0.0064	0.0058 *
Mars	6902-02-27 14:23 G	4242020.88	4242021.10	4242021.38	0.0066	0.0044
Venus	6904-12-16 22:19 G	4243044.30	4243044.43	4243044.56	0.0067	0.0055
Venus	6905-07-30 03:21 G	4243269.43	4243269.64	4243269.86	0.0067	0.0013
Venus	6906-03-12 08:23 G	4243494.66	4243494.85	4243495.06	0.0068	0.0029
Mercury	6913-07-10 17:02 G	4246172.17	4246172.21	4246172.29	0.0071	0.0064
Mercury	6913-10-06 18:00 G	4246260.18	4246260.25	4246260.35	0.0071	0.0055



Mercury	6914-01-02 18:57 G	4246348.19	4246348.29	4246348.40	0.0071	0.0046
Mercury	6914-03-31 19:40 G	4246436.21	4246436.32	4246436.45	0.0071	0.0037
Mercury	6914-06-27 20:23 G	4246524.24	4246524.35	4246524.49	0.0071	0.0029
Mercury	6914-09-23 21:36 G	4246612.26	4246612.40	4246612.53	0.0072	0.0019
Mercury	6914-12-20 22:19 G	4246700.29	4246700.43	4246700.57	0.0072	0.0010
Mercury	6915-03-18 23:02 G	4246788.33	4246788.46	4246788.60	0.0072	0.0003
Mercury	6915-06-15 00:00 G	4246876.36	4246876.50	4246876.64	0.0072	0.0009
Mercury	6915-09-11 00:43 G	4246964.40	4246964.53	4246964.67	0.0072	0.0018
Mercury	6915-12-08 01:40 G	4247052.44	4247052.57	4247052.70	0.0072	0.0028
Mercury	6916-03-05 02:23 G	4247140.49	4247140.60	4247140.72	0.0072	0.0037
Mercury	6916-06-01 03:21 G	4247228.54	4247228.64	4247228.75	0.0072	0.0047
Mercury	6916-08-28 03:50 G	4247316.59	4247316.66	4247316.76	0.0073	0.0057
Mercury	6916-11-24 04:33 G	4247404.66	4247404.69	4247404.77	0.0073	0.0067
Mars	6989-09-22 09:21 G	4274004.66	4274004.89	4274005.19	0.0078	0.0038
Venus	6991-05-25 04:04 G	4274614.61	4274614.67	4274614.78	0.0077	0.0071
Venus	6992-01-05 13:40 G	4274839.85	4274840.07	4274840.30	0.0076	0.0008
Venus	6992-08-17 22:19 G	4275065.30	4275065.43	4275065.61	0.0076	0.0054
Mercury	6999-03-03 04:04 G	4277453.59	4277453.67	4277453.76	0.0073	0.0064
Mercury	6999-05-30 06:14 G	4277541.63	4277541.76	4277541.89	0.0073	0.0051
Mercury	6999-08-26 08:09 G	4277629.69	4277629.84	4277630.01	0.0072	0.0038
Mercury	6999-11-22 10:19 G	4277717.76	4277717.93	4277718.11	0.0072	0.0026
Mercury	7000-02-18 12:14 G	4277805.84	4277806.01	4277806.20	0.0072	0.0014
Mercury	7000-05-17 14:38 G	4277893.92	4277894.11	4277894.29	0.0072	0.0001
Mercury	7000-08-13 16:33 G	4277982.01	4277982.19	4277982.37	0.0072	0.0012
Mercury	7000-11-09 18:28 G	4278070.10	4278070.27	4278070.45	0.0072	0.0025

# 8TH MILLENNIUM CE

**This is a list of transits visible from Pluto in the 8th millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	7001-02-05 20:23	G	4278158.20	4278158.35	4278158.52	0.0072	0.0037	
Mercury	7001-05-04 22:19	G	4278246.31	4278246.43	4278246.58	0.0072	0.0049	
Mercury	7001-08-01 00:28	G	4278334.43	4278334.52	4278334.62	0.0071	0.0061	
Earth	7145-03-21 01:11	G	4330796.39	4330796.55	4330796.75	0.0064	0.0046	
Moon	7145-03-21 05:02	G	4330796.56	4330796.71	4330796.89	0.0064	0.0048	*
Moon	7146-03-22 09:07	G	4331162.74	4331162.88	4331163.08	0.0064	0.0048	
Earth	7146-03-22 12:14	G	4331162.85	4331163.01	4331163.22	0.0064	0.0045	*
Mars	7150-06-08 19:55	G	4332702.04	4332702.33	4332702.65	0.0066	0.0025	
Venus	7153-07-04 06:57	G	4333823.62	4333823.79	4333823.99	0.0067	0.0036	
Venus	7154-02-14 12:28	G	4334048.81	4334049.02	4334049.24	0.0067	0.0007	
Venus	7154-09-27 17:31	G	4334274.09	4334274.23	4334274.39	0.0068	0.0049	
Mercury	7161-08-08 01:11	G	4336780.52	4336780.55	4336780.60	0.0071	0.0067	
Mercury	7161-11-04 01:40	G	4336868.51	4336868.57	4336868.66	0.0071	0.0059	
Mercury	7162-01-31 02:23	G	4336956.52	4336956.60	4336956.72	0.0071	0.0051	
Mercury	7162-04-29 03:21	G	4337044.54	4337044.64	4337044.76	0.0071	0.0041	
Mercury	7162-07-26 04:04	G	4337132.56	4337132.67	4337132.81	0.0071	0.0033	
Mercury	7162-10-22 05:16	G	4337220.59	4337220.72	4337220.85	0.0071	0.0023	
Mercury	7163-01-18 06:00	G	4337308.62	4337308.75	4337308.89	0.0072	0.0014	
Mercury	7163-04-16 06:43	G	4337396.65	4337396.78	4337396.92	0.0072	0.0005	
Mercury	7163-07-13 07:40	G	4337484.68	4337484.82	4337484.96	0.0072	0.0005	
Mercury	7163-10-09 08:23	G	4337572.72	4337572.85	4337572.99	0.0072	0.0014	
Mercury	7164-01-05 09:21	G	4337660.76	4337660.89	4337661.02	0.0072	0.0023	

Mercury	7164-04-02 10:04 G	4337748.80	4337748.92	4337749.05	0.0072	0.0033
Mercury	7164-06-29 10:48 G	4337836.85	4337836.95	4337837.07	0.0072	0.0043
Mercury	7164-09-25 11:31 G	4337924.90	4337924.98	4337925.09	0.0072	0.0053
Mercury	7164-12-22 12:43 G	4338012.96	4338013.03	4338013.10	0.0073	0.0062
Mercury	7165-03-20 13:26 G	4338101.05	4338101.06	4338101.09	0.0073	0.0072
Earth	7234-09-20 23:31 G	4363487.31	4363487.48	4363487.70	0.0079	0.0054
Moon	7234-09-21 03:21 G	4363487.44	4363487.64	4363487.84	0.0079	0.0050 *
Mars	7238-01-02 02:52 G	4364686.46	4364686.62	4364686.82	0.0078	0.0062
Venus	7239-12-10 15:36 G	4365393.98	4365394.15	4365394.36	0.0077	0.0041
Venus	7240-07-23 01:11 G	4365619.34	4365619.55	4365619.77	0.0076	0.0022
Mercury	7247-03-31 09:50 G	4368061.87	4368061.91	4368061.95	0.0073	0.0070
Mercury	7247-06-27 11:16 G	4368149.88	4368149.97	4368150.11	0.0073	0.0058
Mercury	7247-09-23 13:40 G	4368237.94	4368238.07	4368238.23	0.0072	0.0044
Mercury	7247-12-20 15:50 G	4368326.00	4368326.16	4368326.34	0.0072	0.0032
Mercury	7248-03-17 18:00 G	4368414.08	4368414.25	4368414.44	0.0072	0.0019
Mercury	7248-06-13 20:09 G	4368502.16	4368502.34	4368502.53	0.0072	0.0006
Mercury	7248-09-09 22:04 G	4368590.24	4368590.42	4368590.61	0.0072	0.0007
Mercury	7248-12-07 00:14 G	4368678.33	4368678.51	4368678.69	0.0072	0.0019
Mercury	7249-03-05 01:55 G	4368766.43	4368766.58	4368766.76	0.0072	0.0032
Mercury	7249-06-01 03:50 G	4368854.53	4368854.66	4368854.82	0.0072	0.0044
Mercury	7249-08-28 05:45 G	4368942.65	4368942.74	4368942.87	0.0072	0.0056
Mercury	7249-11-24 07:55 G	4369030.78	4369030.83	4369030.90	0.0071	0.0068
Moon	7393-03-23 05:31 G	4421379.69	4421379.73	4421379.84	0.0064	0.0061
Earth	7393-03-23 08:52 G	4421379.80	4421379.87	4421380.00	0.0064	0.0059 *
Earth	7394-03-24 20:09 G	4421746.13	4421746.34	4421746.58	0.0064	0.0031
Moon	7394-03-24 23:02 G	4421746.25	4421746.46	4421746.70	0.0064	0.0033 *
Mars	7398-09-17 01:40 G	4423383.25	4423383.57	4423383.91	0.0066	0.0006
Venus	7401-06-08 10:48 G	4424377.86	4424377.95	4424378.09	0.0067	0.0057
Venus	7402-01-19 16:33 G	4424602.98	4424603.19	4424603.41	0.0067	0.0015
Venus	7402-09-01 21:50 G	4424828.21	4424828.41	4424828.62	0.0068	0.0027

Mercury	7409-09-05 09:07 G	4427388.88	4427388.88	4427388.88	0.0071	0.0071
Mercury	7409-12-02 09:36 G	4427476.85	4427476.90	4427476.97	0.0071	0.0062
Mercury	7410-02-28 10:33 G	4427564.85	4427564.94	4427565.03	0.0071	0.0053
Mercury	7410-05-27 11:16 G	4427652.87	4427652.97	4427653.08	0.0071	0.0045
Mercury	7410-08-23 12:00 G	4427740.89	4427741.00	4427741.12	0.0071	0.0036
Mercury	7410-11-19 12:43 G	4427828.91	4427829.03	4427829.17	0.0071	0.0027
Mercury	7411-02-15 13:40 G	4427916.94	4427917.07	4427917.21	0.0072	0.0017
Mercury	7411-05-14 14:23 G	4428004.97	4428005.10	4428005.24	0.0072	0.0009
Mercury	7411-08-10 15:21 G	4428093.00	4428093.14	4428093.28	0.0072	0.0001
Mercury	7411-11-06 16:04 G	4428181.04	4428181.17	4428181.31	0.0072	0.0010
Mercury	7412-02-02 16:48 G	4428269.07	4428269.20	4428269.34	0.0072	0.0020
Mercury	7412-04-30 17:45 G	4428357.12	4428357.24	4428357.37	0.0072	0.0029
Mercury	7412-07-27 18:43 G	4428445.16	4428445.28	4428445.39	0.0072	0.0039
Mercury	7412-10-23 19:11 G	4428533.21	4428533.30	4428533.41	0.0072	0.0049
Mercury	7413-01-19 19:55 G	4428621.27	4428621.33	4428621.43	0.0073	0.0059
Mercury	7413-04-17 21:07 G	4428709.34	4428709.38	4428709.43	0.0073	0.0068
Moon	7482-09-24 00:43 G	4454070.30	4454070.53	4454070.79	0.0080	0.0030
Earth	7482-09-24 04:19 G	4454070.46	4454070.68	4454070.95	0.0080	0.0029 *
Venus	7487-11-14 18:57 G	4455948.20	4455948.29	4455948.39	0.0077	0.0069
Venus	7488-06-27 04:19 G	4456173.46	4456173.68	4456173.90	0.0076	0.0007
Venus	7489-02-07 12:43 G	4456398.90	4456399.03	4456399.20	0.0076	0.0055
Mercury	7495-07-25 18:00 G	4458758.15	4458758.25	4458758.34	0.0073	0.0061
Mercury	7495-10-21 19:26 G	4458846.20	4458846.31	4458846.47	0.0073	0.0049
Mercury	7496-01-17 21:50 G	4458934.26	4458934.41	4458934.58	0.0072	0.0035
Mercury	7496-04-15 00:00 G	4459022.33	4459022.50	4459022.68	0.0072	0.0022
Mercury	7496-07-12 02:09 G	4459110.41	4459110.59	4459110.78	0.0072	0.0010
Mercury	7496-10-08 04:19 G	4459198.49	4459198.68	4459198.86	0.0072	0.0003
Mercury	7497-01-04 06:00 G	4459286.58	4459286.75	4459286.94	0.0072	0.0016
Mercury	7497-04-02 08:09 G	4459374.68	4459374.84	4459375.02	0.0072	0.0028
Mercury	7497-06-29 10:19 G	4459462.78	4459462.93	4459463.08	0.0072	0.0040

Mercury	7497-09-25 11:45 G	4459550.89	4459550.99	4459551.14	0.0072	0.0053
Mercury	7497-12-22 13:55 G	4459639.02	4459639.08	4459639.17	0.0071	0.0065
Earth	7641-03-26 20:23 G	4511963.32	4511963.35	4511963.44	0.0064	0.0062
Moon	7641-03-26 23:31 G	4511963.42	4511963.48	4511963.60	0.0064	0.0060 *
Moon	7642-03-28 06:43 G	4512329.56	4512329.78	4512330.02	0.0064	0.0025
Earth	7642-03-28 07:26 G	4512329.60	4512329.81	4512330.07	0.0064	0.0028 *
Mars	7646-12-27 14:38 G	4514064.86	4514065.11	4514065.43	0.0066	0.0033
Venus	7649-12-23 22:33 G	4515157.25	4515157.44	4515157.65	0.0067	0.0029
Venus	7650-08-06 03:50 G	4515382.45	4515382.66	4515382.89	0.0068	0.0014
Venus	7651-03-19 09:07 G	4515607.77	4515607.88	4515608.02	0.0068	0.0056
Mercury	7657-10-02 17:31 G	4517997.22	4517997.23	4517997.24	0.0071	0.0070
Mercury	7657-12-29 18:00 G	4518085.20	4518085.25	4518085.33	0.0071	0.0062
Mercury	7658-03-27 18:43 G	4518173.20	4518173.28	4518173.38	0.0071	0.0053
Mercury	7658-06-23 19:26 G	4518261.22	4518261.31	4518261.43	0.0071	0.0045
Mercury	7658-09-19 20:23 G	4518349.24	4518349.35	4518349.48	0.0071	0.0035
Mercury	7658-12-16 21:07 G	4518437.26	4518437.38	4518437.52	0.0071	0.0027
Mercury	7659-03-14 22:04 G	4518525.29	4518525.42	4518525.56	0.0072	0.0017
Mercury	7659-06-10 23:02 G	4518613.32	4518613.46	4518613.59	0.0072	0.0008
Mercury	7659-09-06 23:45 G	4518701.35	4518701.49	4518701.63	0.0072	0.0001
Mercury	7659-12-04 00:28 G	4518789.39	4518789.52	4518789.66	0.0072	0.0011
Mercury	7660-03-01 01:26 G	4518877.43	4518877.56	4518877.69	0.0072	0.0020
Mercury	7660-05-28 01:55 G	4518965.47	4518965.58	4518965.72	0.0072	0.0030
Mercury	7660-08-24 02:52 G	4519053.51	4519053.62	4519053.74	0.0072	0.0039
Mercury	7660-11-20 03:36 G	4519141.56	4519141.65	4519141.76	0.0072	0.0049
Mercury	7661-02-16 04:33 G	4519229.62	4519229.69	4519229.78	0.0073	0.0059
Mercury	7661-05-15 05:16 G	4519317.69	4519317.72	4519317.78	0.0073	0.0069
Earth	7730-09-27 13:11 G	4544653.81	4544654.05	4544654.31	0.0080	0.0019
Moon	7730-09-27 16:04 G	4544653.93	4544654.17	4544654.44	0.0080	0.0023 *
Venus	7736-06-01 09:21 G	4546727.69	4546727.89	4546728.11	0.0076	0.0027
Venus	7737-01-12 18:14 G	4546953.08	4546953.26	4546953.47	0.0076	0.0036

Mercury	7743-08-23 00:43 G	4549366.44	4549366.53	4549366.64	0.0073	0.0061
Mercury	7743-11-19 02:52 G	4549454.49	4549454.62	4549454.77	0.0073	0.0048
Mercury	7744-02-15 05:02 G	4549542.55	4549542.71	4549542.88	0.0072	0.0035
Mercury	7744-05-13 07:11 G	4549630.62	4549630.80	4549630.98	0.0072	0.0022
Mercury	7744-08-09 09:07 G	4549718.70	4549718.88	4549719.07	0.0072	0.0009
Mercury	7744-11-05 11:16 G	4549806.79	4549806.97	4549807.16	0.0072	0.0004
Mercury	7745-02-01 13:11 G	4549894.88	4549895.05	4549895.24	0.0072	0.0016
Mercury	7745-04-30 15:07 G	4549982.97	4549983.13	4549983.31	0.0072	0.0029
Mercury	7745-07-27 17:16 G	4550071.07	4550071.22	4550071.38	0.0072	0.0041
Mercury	7745-10-23 18:57 G	4550159.19	4550159.29	4550159.43	0.0072	0.0054
Mercury	7746-01-19 20:52 G	4550247.32	4550247.37	4550247.46	0.0071	0.0066
Moon	7889-03-30 05:31 G	4602546.72	4602546.73	4602546.81	0.0064	0.0063
Earth	7890-03-31 18:57 G	4602913.06	4602913.29	4602913.54	0.0064	0.0024
Moon	7890-03-31 19:11 G	4602913.07	4602913.30	4602913.57	0.0064	0.0022 *
Venus	7897-11-28 05:02 G	4605711.54	4605711.71	4605711.88	0.0067	0.0043
Venus	7898-07-11 10:19 G	4605936.71	4605936.93	4605937.15	0.0068	0.0001
Venus	7899-02-21 15:50 G	4606161.98	4606162.16	4606162.33	0.0068	0.0042
Mercury	7905-11-01 01:40 G	4608605.56	4608605.57	4608605.60	0.0071	0.0070
Mercury	7906-01-28 02:23 G	4608693.55	4608693.60	4608693.68	0.0071	0.0061
Mercury	7906-04-26 03:21 G	4608781.55	4608781.64	4608781.74	0.0071	0.0052
Mercury	7906-07-23 04:04 G	4608869.57	4608869.67	4608869.79	0.0071	0.0044
Mercury	7906-10-19 04:48 G	4608957.59	4608957.70	4608957.83	0.0071	0.0035
Mercury	7907-01-15 05:45 G	4609045.61	4609045.74	4609045.87	0.0071	0.0025
Mercury	7907-04-13 06:28 G	4609133.64	4609133.77	4609133.91	0.0072	0.0016
Mercury	7907-07-10 07:26 G	4609221.67	4609221.81	4609221.95	0.0072	0.0007
Mercury	7907-10-06 08:09 G	4609309.70	4609309.84	4609309.98	0.0072	0.0003
Mercury	7908-01-02 08:52 G	4609397.74	4609397.87	4609398.01	0.0072	0.0012
Mercury	7908-03-30 09:36 G	4609485.78	4609485.90	4609486.04	0.0072	0.0022
Mercury	7908-06-26 10:33 G	4609573.82	4609573.94	4609574.07	0.0072	0.0031
Mercury	7908-09-22 11:16 G	4609661.87	4609661.97	4609662.09	0.0072	0.0040

Mercury	7908-12-19 12:14 G	4609749.92	4609750.01	4609750.11	0.0072	0.0050
Mercury	7909-03-17 12:57 G	4609837.97	4609838.04	4609838.13	0.0073	0.0060
Mercury	7909-06-13 13:40 G	4609926.05	4609926.07	4609926.12	0.0073	0.0070
Moon	7978-09-30 21:07 G	4635237.13	4635237.38	4635237.64	0.0080	0.0015
Earth	7978-09-30 23:45 G	4635237.23	4635237.49	4635237.75	0.0080	0.0015 *
Venus	7984-05-06 15:50 G	4637281.98	4637282.16	4637282.35	0.0077	0.0042
Venus	7984-12-18 00:43 G	4637507.32	4637507.53	4637507.75	0.0076	0.0021
Mercury	7991-06-24 05:31 G	4639886.72	4639886.73	4639886.79	0.0073	0.0072
Mercury	7991-09-20 08:09 G	4639974.73	4639974.84	4639974.95	0.0073	0.0058
Mercury	7991-12-17 10:19 G	4640062.79	4640062.93	4640063.08	0.0073	0.0045
Mercury	7992-03-14 12:28 G	4640150.85	4640151.02	4640151.19	0.0072	0.0032
Mercury	7992-06-10 14:23 G	4640238.93	4640239.10	4640239.29	0.0072	0.0019
Mercury	7992-09-06 16:33 G	4640327.01	4640327.19	4640327.38	0.0072	0.0006
Mercury	7992-12-03 18:43 G	4640415.10	4640415.28	4640415.46	0.0072	0.0007
Mercury	7993-03-01 20:38 G	4640503.19	4640503.36	4640503.54	0.0072	0.0019
Mercury	7993-05-28 22:33 G	4640591.28	4640591.44	4640591.62	0.0072	0.0032
Mercury	7993-08-25 00:43 G	4640679.39	4640679.53	4640679.68	0.0072	0.0044
Mercury	7993-11-21 02:09 G	4640767.50	4640767.59	4640767.73	0.0072	0.0057
Mercury	7994-02-17 04:19 G	4640855.65	4640855.68	4640855.75	0.0072	0.0069

# 9TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 9th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Earth	8137-04-02 22:04 G	4693130.34	4693130.42	4693130.53	0.0064	0.0059
Moon	8137-04-02 23:02 G	4693130.40	4693130.46	4693130.59	0.0064	0.0060 *
Earth	8138-04-04 09:07 G	4693496.67	4693496.88	4693497.12	0.0064	0.0030
Moon	8138-04-04 10:19 G	4693496.72	4693496.93	4693497.16	0.0064	0.0032 *
Venus	8145-11-02 12:57 G	4696265.91	4696266.04	4696266.21	0.0067	0.0049
Venus	8146-06-15 18:14 G	4696491.05	4696491.26	4696491.49	0.0067	0.0008
Venus	8147-01-26 23:45 G	4696716.31	4696716.49	4696716.68	0.0068	0.0036
Mercury	8153-11-28 10:48 G	4699213.91	4699213.95	4699214.01	0.0071	0.0066
Mercury	8154-02-24 11:31 G	4699301.91	4699301.98	4699302.07	0.0071	0.0057
Mercury	8154-05-23 12:14 G	4699389.92	4699390.01	4699390.12	0.0071	0.0048
Mercury	8154-08-19 12:57 G	4699477.94	4699478.04	4699478.17	0.0071	0.0040
Mercury	8154-11-15 13:55 G	4699565.96	4699566.08	4699566.21	0.0071	0.0030
Mercury	8155-02-11 14:38 G	4699653.99	4699654.11	4699654.25	0.0071	0.0022
Mercury	8155-05-10 15:36 G	4699742.02	4699742.15	4699742.29	0.0072	0.0012
Mercury	8155-08-06 16:19 G	4699830.05	4699830.18	4699830.32	0.0072	0.0004
Mercury	8155-11-02 17:16 G	4699918.08	4699918.22	4699918.35	0.0072	0.0007
Mercury	8156-01-29 18:00 G	4700006.12	4700006.25	4700006.39	0.0072	0.0016
Mercury	8156-04-26 18:57 G	4700094.16	4700094.29	4700094.41	0.0072	0.0026
Mercury	8156-07-23 19:26 G	4700182.20	4700182.31	4700182.44	0.0072	0.0035
Mercury	8156-10-19 20:23 G	4700270.25	4700270.35	4700270.46	0.0072	0.0045
Mercury	8157-01-15 21:07 G	4700358.30	4700358.38	4700358.48	0.0072	0.0055
Mercury	8157-04-13 21:50 G	4700446.36	4700446.41	4700446.49	0.0073	0.0065
Earth	8226-10-04 12:28 G	4725820.78	4725821.02	4725821.28	0.0080	0.0022
Moon	8226-10-04 13:26 G	4725820.80	4725821.06	4725821.33	0.0080	0.0018 *
Venus	8232-04-10 23:31 G	4727836.33	4727836.48	4727836.66	0.0077	0.0052
Venus	8232-11-22 08:38 G	4728061.65	4728061.86	4728062.09	0.0076	0.0011
Venus	8233-07-05 17:02 G	4728287.18	4728287.21	4728287.30	0.0076	0.0073
Mercury	8239-07-22 13:55 G	4730495.02	4730495.08	4730495.17	0.0073	0.0066
Mercury	8239-10-18 16:04 G	4730583.05	4730583.17	4730583.31	0.0073	0.0053



Mercury	8240-01-14 18:14 G	4730671.11	4730671.26	4730671.43	0.0073	0.0040
Mercury	8240-04-11 20:23 G	4730759.18	4730759.35	4730759.53	0.0072	0.0026
Mercury	8240-07-08 22:33 G	4730847.26	4730847.44	4730847.63	0.0072	0.0014
Mercury	8240-10-05 00:43 G	4730935.35	4730935.53	4730935.72	0.0072	0.0001
Mercury	8241-01-01 02:52 G	4731023.44	4731023.62	4731023.80	0.0072	0.0012
Mercury	8241-03-30 04:33 G	4731111.53	4731111.69	4731111.88	0.0072	0.0025
Mercury	8241-06-26 06:28 G	4731199.63	4731199.77	4731199.95	0.0072	0.0038
Mercury	8241-09-22 08:38 G	4731287.74	4731287.86	4731288.01	0.0072	0.0050
Mercury	8241-12-19 10:48 G	4731375.87	4731375.95	4731376.05	0.0072	0.0062
Earth	8385-04-06 12:14 G	4783713.88	4783714.01	4783714.18	0.0064	0.0052
Moon	8385-04-06 12:43 G	4783713.92	4783714.03	4783714.17	0.0064	0.0055 *
Moon	8386-04-07 21:36 G	4784080.21	4784080.40	4784080.63	0.0064	0.0040
Earth	8386-04-07 23:45 G	4784080.29	4784080.49	4784080.71	0.0064	0.0037 *
Venus	8393-10-07 21:21 G	4786820.29	4786820.39	4786820.54	0.0067	0.0055
Venus	8394-05-21 03:07 G	4787045.41	4787045.63	4787045.85	0.0067	0.0012
Venus	8395-01-01 08:09 G	4787270.66	4787270.84	4787271.05	0.0068	0.0031
Mercury	8401-09-29 19:11 G	4789734.29	4789734.30	4789734.34	0.0071	0.0070
Mercury	8401-12-26 19:55 G	4789822.28	4789822.33	4789822.41	0.0071	0.0061
Mercury	8402-03-24 20:38 G	4789910.28	4789910.36	4789910.47	0.0071	0.0053
Mercury	8402-06-20 21:36 G	4789998.30	4789998.40	4789998.52	0.0071	0.0043
Mercury	8402-09-16 22:19 G	4790086.32	4790086.43	4790086.56	0.0071	0.0034
Mercury	8402-12-13 23:02 G	4790174.34	4790174.46	4790174.60	0.0071	0.0026
Mercury	8403-03-12 00:00 G	4790262.37	4790262.50	4790262.64	0.0072	0.0016
Mercury	8403-06-08 00:57 G	4790350.40	4790350.54	4790350.67	0.0072	0.0007
Mercury	8403-09-04 01:40 G	4790438.43	4790438.57	4790438.71	0.0072	0.0003
Mercury	8403-12-01 02:23 G	4790526.47	4790526.60	4790526.74	0.0072	0.0012
Mercury	8404-02-27 03:07 G	4790614.50	4790614.63	4790614.77	0.0072	0.0022
Mercury	8404-05-25 03:50 G	4790702.55	4790702.66	4790702.79	0.0072	0.0031
Mercury	8404-08-21 04:48 G	4790790.59	4790790.70	4790790.82	0.0072	0.0041
Mercury	8404-11-17 05:31 G	4790878.64	4790878.73	4790878.84	0.0072	0.0050

Mercury	8405-02-13 06:28 G	4790966.70	4790966.77	4790966.85	0.0073	0.0060
Mercury	8405-05-12 07:11 G	4791054.77	4791054.80	4791054.84	0.0073	0.0070
Moon	8474-10-07 03:21 G	4816404.43	4816404.64	4816404.88	0.0080	0.0037
Earth	8474-10-07 03:36 G	4816404.44	4816404.65	4816404.90	0.0080	0.0038 *
Mars	8477-07-03 04:33 G	4817404.66	4817404.69	4817404.81	0.0078	0.0077
Venus	8480-03-15 08:52 G	4818390.74	4818390.87	4818391.04	0.0077	0.0056
Venus	8480-10-26 18:14 G	4818616.04	4818616.26	4818616.48	0.0076	0.0007
Venus	8481-06-09 02:52 G	4818841.54	4818841.62	4818841.72	0.0076	0.0069
Mercury	8487-05-22 20:23 G	4821015.32	4821015.35	4821015.41	0.0073	0.0070
Mercury	8487-08-18 22:33 G	4821103.34	4821103.44	4821103.57	0.0073	0.0057
Mercury	8487-11-15 00:43 G	4821191.39	4821191.53	4821191.69	0.0073	0.0044
Mercury	8488-02-11 02:52 G	4821279.46	4821279.62	4821279.80	0.0073	0.0031
Mercury	8488-05-09 05:02 G	4821367.54	4821367.71	4821367.90	0.0072	0.0018
Mercury	8488-08-05 07:26 G	4821455.62	4821455.81	4821455.99	0.0072	0.0004
Mercury	8488-11-01 09:21 G	4821543.71	4821543.89	4821544.08	0.0072	0.0009
Mercury	8489-01-28 11:31 G	4821631.80	4821631.98	4821632.16	0.0072	0.0021
Mercury	8489-04-26 13:26 G	4821719.90	4821720.06	4821720.23	0.0072	0.0034
Mercury	8489-07-23 15:07 G	4821808.01	4821808.13	4821808.29	0.0072	0.0047
Mercury	8489-10-19 17:16 G	4821896.13	4821896.22	4821896.34	0.0072	0.0059
Mercury	8490-01-15 19:11 G	4821984.30	4821984.30	4821984.34	0.0072	0.0071
Moon	8633-04-10 06:00 G	4874297.53	4874297.75	4874297.98	0.0064	0.0034
Earth	8633-04-10 06:28 G	4874297.57	4874297.77	4874298.00	0.0064	0.0034 *
Earth	8634-04-11 17:45 G	4874664.12	4874664.24	4874664.39	0.0064	0.0055
Moon	8634-04-11 20:09 G	4874664.24	4874664.34	4874664.50	0.0064	0.0055 *
Mars	8638-03-18 09:36 G	4876100.65	4876100.90	4876101.19	0.0066	0.0037
Venus	8641-09-12 08:38 G	4877374.74	4877374.86	4877375.03	0.0067	0.0051
Venus	8642-04-25 14:09 G	4877599.88	4877600.09	4877600.32	0.0068	0.0009
Venus	8642-12-06 19:11 G	4877825.13	4877825.30	4877825.50	0.0068	0.0035
Mercury	8649-08-01 04:33 G	4880254.67	4880254.69	4880254.72	0.0071	0.0069
Mercury	8649-10-28 05:16 G	4880342.66	4880342.72	4880342.80	0.0071	0.0060

Mercury	8650-01-24 06:14 G	4880430.67	4880430.76	4880430.85	0.0071	0.0051
Mercury	8650-04-22 06:57 G	4880518.68	4880518.79	4880518.90	0.0071	0.0043
Mercury	8650-07-19 07:40 G	4880606.70	4880606.82	4880606.94	0.0071	0.0034
Mercury	8650-10-15 08:23 G	4880694.72	4880694.85	4880694.98	0.0071	0.0025
Mercury	8651-01-11 09:07 G	4880782.75	4880782.88	4880783.02	0.0072	0.0016
Mercury	8651-04-09 10:04 G	4880870.78	4880870.92	4880871.05	0.0072	0.0006
Mercury	8651-07-06 10:48 G	4880958.81	4880958.95	4880959.09	0.0072	0.0003
Mercury	8651-10-02 11:31 G	4881046.85	4881046.98	4881047.12	0.0072	0.0013
Mercury	8651-12-29 12:14 G	4881134.89	4881135.01	4881135.15	0.0072	0.0022
Mercury	8652-03-26 13:11 G	4881222.93	4881223.05	4881223.17	0.0072	0.0031
Mercury	8652-06-22 13:40 G	4881310.97	4881311.07	4881311.20	0.0072	0.0042
Mercury	8652-09-18 14:38 G	4881399.02	4881399.11	4881399.21	0.0072	0.0051
Mercury	8652-12-15 15:21 G	4881487.08	4881487.14	4881487.23	0.0072	0.0061
Mercury	8653-03-13 16:04 G	4881575.16	4881575.17	4881575.22	0.0073	0.0071
Moon	8722-10-11 20:52 G	4906988.26	4906988.37	4906988.54	0.0080	0.0069
Earth	8722-10-11 22:19 G	4906988.30	4906988.43	4906988.60	0.0080	0.0065 *
Mars	8725-10-14 22:19 G	4908087.18	4908087.43	4908087.73	0.0078	0.0035
Venus	8728-02-19 19:55 G	4908945.19	4908945.33	4908945.50	0.0077	0.0053
Venus	8728-10-02 05:02 G	4909170.50	4909170.71	4909170.94	0.0076	0.0011
Venus	8729-05-15 13:55 G	4909396.02	4909396.08	4909396.15	0.0076	0.0072
Mercury	8735-03-25 03:50 G	4911535.63	4911535.66	4911535.70	0.0073	0.0071
Mercury	8735-06-21 05:45 G	4911623.65	4911623.74	4911623.87	0.0073	0.0058
Mercury	8735-09-17 07:55 G	4911711.70	4911711.83	4911712.00	0.0073	0.0045
Mercury	8735-12-14 10:04 G	4911799.77	4911799.92	4911800.11	0.0073	0.0032
Mercury	8736-03-11 12:28 G	4911887.85	4911888.02	4911888.21	0.0072	0.0018
Mercury	8736-06-07 14:38 G	4911975.93	4911976.11	4911976.30	0.0072	0.0005
Mercury	8736-09-03 16:48 G	4912064.02	4912064.20	4912064.39	0.0072	0.0008
Mercury	8736-11-30 18:43 G	4912152.11	4912152.28	4912152.47	0.0072	0.0021
Mercury	8737-02-26 20:52 G	4912240.21	4912240.37	4912240.54	0.0072	0.0033
Mercury	8737-05-25 22:48 G	4912328.32	4912328.45	4912328.60	0.0072	0.0046

Mercury	8737-08-22 00:28 G	4912416.44	4912416.52	4912416.65	0.0072	0.0059
Mercury	8737-11-18 02:38 G	4912504.60	4912504.61	4912504.66	0.0072	0.0071
Earth	8881-04-13 02:52 G	4964881.37	4964881.62	4964881.88	0.0064	0.0010
Moon	8881-04-13 05:02 G	4964881.46	4964881.71	4964881.96	0.0064	0.0007 *
Mars	8886-06-27 18:00 G	4966783.10	4966783.25	4966783.49	0.0066	0.0054
Venus	8889-08-16 21:07 G	4967929.23	4967929.38	4967929.57	0.0067	0.0043
Venus	8890-03-30 02:52 G	4968154.40	4968154.62	4968154.84	0.0068	0.0001
Venus	8890-11-10 07:40 G	4968379.67	4968379.82	4968380.01	0.0068	0.0044
Mercury	8897-06-01 14:09 G	4970775.05	4970775.09	4970775.15	0.0071	0.0066
Mercury	8897-08-28 14:52 G	4970863.05	4970863.12	4970863.21	0.0071	0.0057
Mercury	8897-11-24 15:36 G	4970951.06	4970951.15	4970951.26	0.0071	0.0048
Mercury	8898-02-20 16:19 G	4971039.08	4971039.18	4971039.30	0.0071	0.0040
Mercury	8898-05-19 17:16 G	4971127.10	4971127.22	4971127.35	0.0071	0.0030
Mercury	8898-08-15 18:00 G	4971215.13	4971215.25	4971215.39	0.0071	0.0021
Mercury	8898-11-11 18:57 G	4971303.15	4971303.29	4971303.42	0.0072	0.0012
Mercury	8899-02-07 19:40 G	4971391.18	4971391.32	4971391.46	0.0072	0.0003
Mercury	8899-05-06 20:23 G	4971479.22	4971479.35	4971479.49	0.0072	0.0007
Mercury	8899-08-02 21:21 G	4971567.25	4971567.39	4971567.52	0.0072	0.0016
Mercury	8899-10-29 21:50 G	4971655.29	4971655.41	4971655.55	0.0072	0.0026
Mercury	8900-01-25 22:48 G	4971743.33	4971743.45	4971743.57	0.0072	0.0035
Mercury	8900-04-23 23:16 G	4971831.38	4971831.47	4971831.59	0.0072	0.0046
Mercury	8900-07-21 00:14 G	4971919.43	4971919.51	4971919.61	0.0072	0.0055
Mercury	8900-10-17 00:57 G	4972007.50	4972007.54	4972007.62	0.0073	0.0065
Moon	8969-10-12 16:19 G	4997205.06	4997205.18	4997205.36	0.0080	0.0066
Earth	8969-10-12 17:16 G	4997205.08	4997205.22	4997205.40	0.0080	0.0063 *
Venus	8976-01-24 10:33 G	4999499.75	4999499.94	4999500.14	0.0077	0.0037
Venus	8976-09-05 19:26 G	4999725.11	4999725.31	4999725.53	0.0076	0.0026
Mercury	8983-01-23 12:28 G	5002055.95	5002056.02	5002056.12	0.0073	0.0065
Mercury	8983-04-21 14:38 G	5002143.99	5002144.11	5002144.26	0.0073	0.0052
Mercury	8983-07-18 16:48 G	5002232.06	5002232.20	5002232.37	0.0073	0.0039

Mercury	8983-10-14 19:11 G	5002320.13	5002320.30	5002320.48	0.0073	0.0025
Mercury	8984-01-10 21:21 G	5002408.21	5002408.39	5002408.58	0.0072	0.0012
Mercury	8984-04-07 23:31 G	5002496.30	5002496.48	5002496.67	0.0072	0.0002
Mercury	8984-07-05 01:40 G	5002584.39	5002584.57	5002584.75	0.0072	0.0014
Mercury	8984-10-01 03:36 G	5002672.48	5002672.65	5002672.83	0.0072	0.0027
Mercury	8984-12-28 05:31 G	5002760.59	5002760.73	5002760.90	0.0072	0.0040
Mercury	8985-03-26 07:55 G	5002848.70	5002848.83	5002848.96	0.0072	0.0052
Mercury	8985-06-22 09:36 G	5002936.84	5002936.90	5002936.99	0.0072	0.0065

# 10TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 10th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Earth	9128-04-16 16:04 G		5055099.12	5055099.17	5055099.26	0.0064	0.0061	
Moon	9128-04-16 17:31 G		5055099.21	5055099.23	5055099.26	0.0064	0.0063	*
Moon	9129-04-18 00:57 G		5055465.31	5055465.54	5055465.78	0.0064	0.0029	
Earth	9129-04-18 03:07 G		5055465.42	5055465.63	5055465.88	0.0064	0.0027	*
Venus	9136-12-10 08:09 G		5058258.80	5058258.84	5058258.89	0.0067	0.0066	
Venus	9137-07-23 12:57 G		5058483.85	5058484.04	5058484.27	0.0067	0.0024	
Venus	9138-03-05 18:43 G		5058709.07	5058709.28	5058709.49	0.0068	0.0020	
Venus	9138-10-16 23:31 G		5058934.43	5058934.48	5058934.57	0.0068	0.0064	
Mercury	9145-01-06 00:00 G		5061207.46	5061207.50	5061207.55	0.0071	0.0066	
Mercury	9145-04-04 00:43 G		5061295.46	5061295.53	5061295.62	0.0071	0.0057	

Mercury	9145-07-01 01:40 G	5061383.47	5061383.57	5061383.67	0.0071	0.0048
Mercury	9145-09-27 02:23 G	5061471.49	5061471.60	5061471.71	0.0071	0.0039
Mercury	9145-12-24 03:07 G	5061559.51	5061559.63	5061559.76	0.0071	0.0030
Mercury	9146-03-22 03:50 G	5061647.53	5061647.66	5061647.80	0.0071	0.0021
Mercury	9146-06-18 04:33 G	5061735.56	5061735.69	5061735.83	0.0072	0.0013
Mercury	9146-09-14 05:31 G	5061823.59	5061823.73	5061823.87	0.0072	0.0003
Mercury	9146-12-11 06:14 G	5061911.63	5061911.76	5061911.90	0.0072	0.0007
Mercury	9147-03-09 06:57 G	5061999.66	5061999.79	5061999.93	0.0072	0.0016
Mercury	9147-06-05 07:55 G	5062087.70	5062087.83	5062087.96	0.0072	0.0025
Mercury	9147-09-01 08:23 G	5062175.74	5062175.85	5062175.98	0.0072	0.0035
Mercury	9147-11-28 09:21 G	5062263.79	5062263.89	5062264.00	0.0072	0.0045
Mercury	9148-02-24 10:04 G	5062351.84	5062351.92	5062352.02	0.0072	0.0055
Mercury	9148-05-22 10:48 G	5062439.90	5062439.95	5062440.03	0.0073	0.0065
Earth	9217-10-16 23:31 G	5087789.22	5087789.48	5087789.74	0.0080	0.0004
Moon	9217-10-17 00:00 G	5087789.25	5087789.50	5087789.76	0.0080	0.0006 *
Venus	9223-05-18 18:00 G	5089829.22	5089829.25	5089829.32	0.0077	0.0075
Venus	9223-12-30 03:36 G	5090054.43	5090054.65	5090054.87	0.0076	0.0011
Venus	9224-08-11 12:14 G	5090279.87	5090280.01	5090280.19	0.0076	0.0053
Mercury	9230-08-28 20:23 G	5092488.29	5092488.35	5092488.43	0.0073	0.0067
Mercury	9230-11-24 22:19 G	5092576.32	5092576.43	5092576.58	0.0073	0.0054
Mercury	9231-02-21 00:57 G	5092664.38	5092664.54	5092664.70	0.0073	0.0040
Mercury	9231-05-20 02:52 G	5092752.46	5092752.62	5092752.80	0.0073	0.0027
Mercury	9231-08-16 05:16 G	5092840.54	5092840.72	5092840.90	0.0072	0.0014
Mercury	9231-11-12 07:26 G	5092928.62	5092928.81	5092929.00	0.0072	0.0001
Mercury	9232-02-08 09:36 G	5093016.71	5093016.90	5093017.08	0.0072	0.0013
Mercury	9232-05-06 11:31 G	5093104.81	5093104.98	5093105.16	0.0072	0.0025
Mercury	9232-08-02 13:26 G	5093192.91	5093193.06	5093193.23	0.0072	0.0038
Mercury	9232-10-29 15:21 G	5093281.03	5093281.14	5093281.29	0.0072	0.0051
Mercury	9233-01-25 17:16 G	5093369.16	5093369.22	5093369.33	0.0072	0.0064
Moon	9376-04-19 18:43 G	5145683.03	5145683.28	5145683.55	0.0064	0.0014

Earth	9376-04-19 20:09 G	5145683.09	5145683.34	5145683.59	0.0064	0.0016 *
Mars	9381-02-26 20:23 G	5147457.04	5147457.35	5147457.69	0.0066	0.0003
Venus	9384-11-14 01:26 G	5148813.41	5148813.56	5148813.76	0.0067	0.0040
Venus	9385-06-27 07:11 G	5149038.58	5149038.80	5149039.02	0.0068	0.0004
Venus	9386-02-07 12:14 G	5149263.87	5149264.01	5149264.18	0.0068	0.0048
Mercury	9392-08-10 10:33 G	5151639.88	5151639.94	5151640.01	0.0071	0.0062
Mercury	9392-11-06 11:16 G	5151727.89	5151727.97	5151728.06	0.0071	0.0053
Mercury	9393-02-02 12:00 G	5151815.90	5151816.00	5151816.11	0.0071	0.0044
Mercury	9393-05-01 12:43 G	5151903.92	5151904.03	5151904.16	0.0071	0.0036
Mercury	9393-07-28 13:26 G	5151991.94	5151992.06	5151992.20	0.0071	0.0027
Mercury	9393-10-24 14:23 G	5152079.97	5152080.10	5152080.23	0.0071	0.0017
Mercury	9394-01-20 15:07 G	5152168.00	5152168.13	5152168.27	0.0072	0.0008
Mercury	9394-04-18 16:04 G	5152256.03	5152256.17	5152256.30	0.0072	0.0002
Mercury	9394-07-15 16:48 G	5152344.06	5152344.20	5152344.33	0.0072	0.0011
Mercury	9394-10-11 17:31 G	5152432.10	5152432.23	5152432.36	0.0072	0.0020
Mercury	9395-01-07 18:14 G	5152520.14	5152520.26	5152520.39	0.0072	0.0030
Mercury	9395-04-05 18:57 G	5152608.18	5152608.29	5152608.41	0.0072	0.0040
Mercury	9395-07-02 19:40 G	5152696.23	5152696.32	5152696.43	0.0072	0.0050
Mercury	9395-09-28 20:52 G	5152784.29	5152784.37	5152784.45	0.0072	0.0059
Mercury	9395-12-25 21:21 G	5152872.36	5152872.39	5152872.44	0.0073	0.0069
Earth	9464-10-19 06:28 G	5178006.73	5178006.77	5178006.88	0.0080	0.0077
Venus	9471-04-23 16:04 G	5180383.97	5180384.17	5180384.37	0.0077	0.0030
Venus	9471-12-05 00:43 G	5180609.35	5180609.53	5180609.74	0.0076	0.0034
Mercury	9478-01-05 04:04 G	5182832.67	5182832.67	5182832.69	0.0073	0.0073
Mercury	9478-04-03 06:28 G	5182920.67	5182920.77	5182920.88	0.0073	0.0059
Mercury	9478-06-30 08:23 G	5183008.72	5183008.85	5183009.01	0.0073	0.0046
Mercury	9478-09-26 10:33 G	5183096.79	5183096.94	5183097.12	0.0073	0.0033
Mercury	9478-12-23 12:57 G	5183184.86	5183185.04	5183185.23	0.0073	0.0019
Mercury	9479-03-21 15:07 G	5183272.95	5183273.13	5183273.32	0.0072	0.0006
Mercury	9479-06-17 17:16 G	5183361.04	5183361.22	5183361.41	0.0072	0.0007

Mercury	9479-09-13 19:26 G	5183449.13	5183449.31	5183449.49	0.0072	0.0020
Mercury	9479-12-10 21:21 G	5183537.23	5183537.39	5183537.56	0.0072	0.0033
Mercury	9480-03-07 23:16 G	5183625.34	5183625.47	5183625.63	0.0072	0.0046
Mercury	9480-06-04 01:11 G	5183713.47	5183713.55	5183713.68	0.0072	0.0059
Mercury	9480-08-31 03:36 G	5183801.64	5183801.65	5183801.68	0.0072	0.0071
Earth	9623-04-23 15:50 G	5235901.02	5235901.16	5235901.38	0.0064	0.0046
Moon	9623-04-23 16:04 G	5235901.03	5235901.17	5235901.37	0.0064	0.0049 *
Earth	9624-04-24 03:36 G	5236267.47	5236267.65	5236267.85	0.0064	0.0043
Moon	9624-04-24 05:16 G	5236267.58	5236267.72	5236267.93	0.0064	0.0047 *
Venus	9632-03-08 17:16 G	5239143.07	5239143.22	5239143.39	0.0067	0.0046
Venus	9632-10-19 22:33 G	5239368.23	5239368.44	5239368.67	0.0068	0.0003
Venus	9633-06-02 04:04 G	5239593.49	5239593.67	5239593.84	0.0068	0.0041
Mercury	9639-12-18 21:07 G	5241984.33	5241984.38	5241984.45	0.0071	0.0062
Mercury	9640-03-15 21:50 G	5242072.33	5242072.41	5242072.51	0.0071	0.0053
Mercury	9640-06-11 22:33 G	5242160.34	5242160.44	5242160.55	0.0071	0.0045
Mercury	9640-09-07 23:31 G	5242248.36	5242248.48	5242248.60	0.0071	0.0035
Mercury	9640-12-05 00:14 G	5242336.39	5242336.51	5242336.64	0.0071	0.0026
Mercury	9641-03-03 00:57 G	5242424.41	5242424.54	5242424.68	0.0071	0.0017
Mercury	9641-05-30 01:40 G	5242512.44	5242512.57	5242512.71	0.0072	0.0009
Mercury	9641-08-26 02:38 G	5242600.47	5242600.61	5242600.74	0.0072	0.0002
Mercury	9641-11-22 03:21 G	5242688.51	5242688.64	5242688.78	0.0072	0.0011
Mercury	9642-02-18 04:04 G	5242776.54	5242776.67	5242776.81	0.0072	0.0020
Mercury	9642-05-17 04:48 G	5242864.58	5242864.70	5242864.83	0.0072	0.0030
Mercury	9642-08-13 05:45 G	5242952.63	5242952.74	5242952.85	0.0072	0.0039
Mercury	9642-11-09 06:14 G	5243040.67	5243040.76	5243040.87	0.0072	0.0050
Mercury	9643-02-05 07:26 G	5243128.73	5243128.81	5243128.89	0.0072	0.0059
Mercury	9643-05-04 07:55 G	5243216.80	5243216.83	5243216.88	0.0073	0.0069
Moon	9712-10-24 00:43 G	5268591.29	5268591.53	5268591.78	0.0080	0.0034
Earth	9712-10-24 01:11 G	5268591.33	5268591.55	5268591.80	0.0080	0.0036 *
Venus	9718-08-16 06:28 G	5270713.60	5270713.77	5270713.97	0.0077	0.0041



Venus	9719-03-29 15:36 G	5270938.95	5270939.15	5270939.37	0.0076	0.0024
Mercury	9725-08-10 15:07 G	5273265.04	5273265.13	5273265.25	0.0073	0.0060
Mercury	9725-11-06 17:02 G	5273353.09	5273353.21	5273353.38	0.0073	0.0047
Mercury	9726-02-02 19:40 G	5273441.16	5273441.32	5273441.49	0.0073	0.0033
Mercury	9726-05-01 21:50 G	5273529.23	5273529.41	5273529.59	0.0073	0.0020
Mercury	9726-07-29 00:00 G	5273617.31	5273617.50	5273617.69	0.0072	0.0006
Mercury	9726-10-25 02:09 G	5273705.40	5273705.59	5273705.78	0.0072	0.0007
Mercury	9727-01-21 04:04 G	5273793.50	5273793.67	5273793.86	0.0072	0.0020
Mercury	9727-04-19 06:00 G	5273881.60	5273881.75	5273881.93	0.0072	0.0033
Mercury	9727-07-16 07:55 G	5273969.71	5273969.83	5273970.00	0.0072	0.0046
Mercury	9727-10-12 10:19 G	5274057.83	5274057.93	5274058.05	0.0072	0.0058
Mercury	9728-01-08 12:14 G	5274146.00	5274146.01	5274146.05	0.0072	0.0071
Moon	9870-04-26 17:31 G	5326119.23	5326119.23	5326119.23	0.0064	0.0064
Earth	9871-04-28 03:07 G	5326485.40	5326485.63	5326485.88	0.0064	0.0022
Moon	9871-04-28 04:04 G	5326485.44	5326485.67	5326485.91	0.0064	0.0021 *
Mars	9875-10-31 05:16 G	5328132.44	5328132.72	5328133.05	0.0066	0.0021
Venus	9879-07-02 10:19 G	5329472.79	5329472.93	5329473.12	0.0067	0.0045
Venus	9880-02-12 16:19 G	5329697.96	5329698.18	5329698.40	0.0068	0.0001
Venus	9880-09-24 21:21 G	5329923.23	5329923.39	5329923.57	0.0068	0.0043
Mercury	9887-01-29 07:26 G	5332240.78	5332240.81	5332240.87	0.0071	0.0067
Mercury	9887-04-27 08:23 G	5332328.78	5332328.85	5332328.93	0.0071	0.0058
Mercury	9887-07-24 09:07 G	5332416.79	5332416.88	5332416.99	0.0071	0.0049
Mercury	9887-10-20 09:50 G	5332504.81	5332504.91	5332505.03	0.0071	0.0040
Mercury	9888-01-16 10:33 G	5332592.83	5332592.94	5332593.07	0.0071	0.0031
Mercury	9888-04-13 11:31 G	5332680.85	5332680.98	5332681.11	0.0071	0.0022
Mercury	9888-07-10 12:14 G	5332768.88	5332769.01	5332769.15	0.0072	0.0013
Mercury	9888-10-06 12:57 G	5332856.91	5332857.04	5332857.18	0.0072	0.0004
Mercury	9889-01-02 13:55 G	5332944.94	5332945.08	5332945.21	0.0072	0.0006
Mercury	9889-03-31 14:38 G	5333032.98	5333033.11	5333033.24	0.0072	0.0015
Mercury	9889-06-27 15:21 G	5333121.01	5333121.14	5333121.27	0.0072	0.0025

Mercury	9889-09-23 16:04 G	5333209.06	5333209.17	5333209.30	0.0072	0.0035
Mercury	9889-12-20 16:48 G	5333297.10	5333297.20	5333297.32	0.0072	0.0044
Mercury	9890-03-18 17:45 G	5333385.15	5333385.24	5333385.33	0.0072	0.0054
Mercury	9890-06-14 18:28 G	5333473.21	5333473.27	5333473.34	0.0073	0.0064
Earth	9959-10-27 21:21 G	5358809.13	5358809.39	5358809.65	0.0080	0.0001
Moon	9959-10-27 22:19 G	5358809.16	5358809.43	5358809.70	0.0080	0.0002 *
Venus	9965-12-09 01:40 G	5361043.37	5361043.57	5361043.77	0.0077	0.0033
Venus	9966-07-22 10:33 G	5361268.74	5361268.94	5361269.15	0.0076	0.0031
Mercury	9972-09-20 23:45 G	5363521.42	5363521.49	5363521.58	0.0073	0.0065
Mercury	9972-12-18 01:40 G	5363609.46	5363609.57	5363609.72	0.0073	0.0052
Mercury	9973-03-16 04:19 G	5363697.52	5363697.68	5363697.84	0.0073	0.0038
Mercury	9973-06-12 06:14 G	5363785.60	5363785.76	5363785.95	0.0073	0.0025
Mercury	9973-09-08 08:38 G	5363873.68	5363873.86	5363874.05	0.0073	0.0011
Mercury	9973-12-05 10:48 G	5363961.77	5363961.95	5363962.14	0.0072	0.0003
Mercury	9974-03-03 12:57 G	5364049.86	5364050.04	5364050.23	0.0072	0.0015
Mercury	9974-05-30 14:52 G	5364137.96	5364138.12	5364138.30	0.0072	0.0029
Mercury	9974-08-26 17:02 G	5364226.06	5364226.21	5364226.37	0.0072	0.0041
Mercury	9974-11-22 18:57 G	5364314.18	5364314.29	5364314.43	0.0072	0.0054
Mercury	9975-02-18 20:52 G	5364402.33	5364402.37	5364402.46	0.0072	0.0067

# 11TH MILLENNIUM CE

**This is a list of transits visible from Pluto in the 11th millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Moon	10118-05-01 05:45 G	5416703.49	5416703.74	5416703.98	0.0064	0.0011
Earth	10118-05-01 06:14 G	5416703.53	5416703.76	5416704.03	0.0064	0.0012 *
Venus	10126-10-25 06:14 G	5419802.59	5419802.76	5419802.97	0.0067	0.0035
Venus	10127-06-07 12:00 G	5420027.78	5420028.00	5420028.22	0.0068	0.0010
Venus	10128-01-18 16:48 G	5420253.10	5420253.20	5420253.36	0.0068	0.0054
Mercury	10134-03-11 19:11 G	5422497.26	5422497.30	5422497.34	0.0071	0.0067
Mercury	10134-06-07 19:55 G	5422585.25	5422585.33	5422585.41	0.0071	0.0058
Mercury	10134-09-03 20:38 G	5422673.26	5422673.36	5422673.46	0.0071	0.0049
Mercury	10134-11-30 21:21 G	5422761.28	5422761.39	5422761.50	0.0071	0.0040
Mercury	10135-02-26 22:04 G	5422849.30	5422849.42	5422849.54	0.0071	0.0031
Mercury	10135-05-25 22:48 G	5422937.32	5422937.45	5422937.58	0.0071	0.0022
Mercury	10135-08-21 23:31 G	5423025.35	5423025.48	5423025.62	0.0072	0.0013
Mercury	10135-11-18 00:14 G	5423113.38	5423113.51	5423113.65	0.0072	0.0005
Mercury	10136-02-14 01:11 G	5423201.41	5423201.55	5423201.68	0.0072	0.0006
Mercury	10136-05-12 01:55 G	5423289.45	5423289.58	5423289.71	0.0072	0.0015
Mercury	10136-08-08 02:38 G	5423377.48	5423377.61	5423377.74	0.0072	0.0025
Mercury	10136-11-04 03:21 G	5423465.52	5423465.64	5423465.76	0.0072	0.0034
Mercury	10137-01-31 04:19 G	5423553.57	5423553.68	5423553.79	0.0072	0.0044
Mercury	10137-04-29 04:48 G	5423641.62	5423641.70	5423641.80	0.0072	0.0054
Mercury	10137-07-26 05:31 G	5423729.68	5423729.73	5423729.81	0.0072	0.0064
Earth	10206-10-30 20:23 G	5449027.11	5449027.35	5449027.61	0.0080	0.0024
Moon	10206-10-30 23:02 G	5449027.21	5449027.46	5449027.74	0.0080	0.0020 *
Mars	10209-10-20 11:45 G	5450112.82	5450112.99	5450113.20	0.0078	0.0062
Venus	10213-04-02 22:33 G	5451373.24	5451373.44	5451373.67	0.0077	0.0019
Venus	10213-11-14 07:26 G	5451598.64	5451598.81	5451599.00	0.0076	0.0045
Mercury	10219-11-02 08:52 G	5453777.82	5453777.87	5453777.97	0.0073	0.0067
Mercury	10220-01-29 11:16 G	5453865.86	5453865.97	5453866.12	0.0073	0.0053
Mercury	10220-04-26 13:55 G	5453953.92	5453954.08	5453954.24	0.0073	0.0039
Mercury	10220-07-23 15:50 G	5454042.00	5454042.16	5454042.35	0.0073	0.0026

Mercury	10220-10-19 18:00 G	5454130.08	5454130.25	5454130.45	0.0073	0.0013
Mercury	10221-01-15 20:23 G	5454218.16	5454218.35	5454218.54	0.0072	0.0001
Mercury	10221-04-13 22:33 G	5454306.26	5454306.44	5454306.62	0.0072	0.0014
Mercury	10221-07-11 00:43 G	5454394.36	5454394.53	5454394.70	0.0072	0.0028
Mercury	10221-10-07 02:52 G	5454482.46	5454482.62	5454482.77	0.0072	0.0041
Mercury	10222-01-03 04:48 G	5454570.58	5454570.70	5454570.83	0.0072	0.0053
Mercury	10222-04-01 06:43 G	5454658.72	5454658.78	5454658.86	0.0072	0.0066
Moon	10365-05-04 09:50 G	5506921.68	5506921.91	5506922.17	0.0064	0.0014
Earth	10365-05-04 12:28 G	5506921.78	5506922.02	5506922.28	0.0064	0.0011 *
Venus	10373-07-06 23:02 G	5509907.39	5509907.46	5509907.59	0.0067	0.0060
Venus	10374-02-17 05:02 G	5510132.50	5510132.71	5510132.93	0.0068	0.0016
Venus	10374-09-30 09:50 G	5510357.73	5510357.91	5510358.13	0.0068	0.0029
Mercury	10381-04-22 07:11 G	5512753.74	5512753.80	5512753.86	0.0071	0.0063
Mercury	10381-07-19 07:55 G	5512841.75	5512841.83	5512841.92	0.0071	0.0054
Mercury	10381-10-15 08:38 G	5512929.76	5512929.86	5512929.96	0.0071	0.0045
Mercury	10382-01-11 09:21 G	5513017.78	5513017.89	5513018.01	0.0071	0.0036
Mercury	10382-04-09 10:04 G	5513105.80	5513105.92	5513106.05	0.0071	0.0027
Mercury	10382-07-06 10:48 G	5513193.82	5513193.95	5513194.09	0.0071	0.0018
Mercury	10382-10-02 11:31 G	5513281.85	5513281.98	5513282.12	0.0072	0.0009
Mercury	10382-12-29 12:28 G	5513369.88	5513370.02	5513370.15	0.0072	0.0002
Mercury	10383-03-27 13:11 G	5513457.91	5513458.05	5513458.18	0.0072	0.0010
Mercury	10383-06-23 13:55 G	5513545.95	5513546.08	5513546.21	0.0072	0.0019
Mercury	10383-09-19 14:38 G	5513633.99	5513634.11	5513634.24	0.0072	0.0029
Mercury	10383-12-16 15:36 G	5513722.03	5513722.15	5513722.26	0.0072	0.0039
Mercury	10384-03-13 16:04 G	5513810.08	5513810.17	5513810.28	0.0072	0.0049
Mercury	10384-06-09 16:48 G	5513898.13	5513898.20	5513898.29	0.0072	0.0058
Mercury	10384-09-05 18:00 G	5513986.20	5513986.25	5513986.29	0.0073	0.0068
Earth	10453-11-02 03:21 G	5539245.40	5539245.64	5539245.90	0.0080	0.0019
Moon	10453-11-02 06:57 G	5539245.55	5539245.79	5539246.06	0.0080	0.0022 *
Venus	10459-12-13 14:38 G	5541477.96	5541478.11	5541478.29	0.0077	0.0051

Venus	10460-07-26 00:00 G	5541703.28	5541703.50	5541703.72	0.0076	0.0014
Mercury	10466-09-15 18:28 G	5543946.25	5543946.27	5543946.30	0.0073	0.0072
Mercury	10466-12-12 20:09 G	5544034.26	5544034.34	5544034.48	0.0073	0.0059
Mercury	10467-03-10 22:33 G	5544122.31	5544122.44	5544122.61	0.0073	0.0045
Mercury	10467-06-07 01:11 G	5544210.38	5544210.55	5544210.72	0.0073	0.0031
Mercury	10467-09-03 03:21 G	5544298.46	5544298.64	5544298.83	0.0073	0.0018
Mercury	10467-11-30 05:31 G	5544386.55	5544386.73	5544386.92	0.0073	0.0004
Mercury	10468-02-26 07:40 G	5544474.64	5544474.82	5544475.01	0.0072	0.0010
Mercury	10468-05-24 09:50 G	5544562.74	5544562.91	5544563.09	0.0072	0.0023
Mercury	10468-08-20 11:45 G	5544650.84	5544650.99	5544651.17	0.0072	0.0036
Mercury	10468-11-16 13:40 G	5544738.95	5544739.07	5544739.23	0.0072	0.0049
Mercury	10469-02-12 15:50 G	5544827.09	5544827.16	5544827.27	0.0072	0.0062
Moon	10611-05-07 14:23 G	5596774.07	5596774.10	5596774.19	0.0064	0.0062
Moon	10612-05-07 19:11 G	5597140.07	5597140.30	5597140.56	0.0064	0.0020
Earth	10612-05-07 22:33 G	5597140.22	5597140.44	5597140.70	0.0064	0.0023 *
Mars	10616-11-24 18:28 G	5598802.09	5598802.27	5598802.51	0.0066	0.0050
Venus	10620-10-30 00:28 G	5600237.34	5600237.52	5600237.73	0.0068	0.0032
Venus	10621-06-12 06:00 G	5600462.54	5600462.75	5600462.97	0.0068	0.0013
Venus	10622-01-23 11:16 G	5600687.86	5600687.97	5600688.09	0.0068	0.0057
Mercury	10628-03-06 18:57 G	5602922.25	5602922.29	5602922.36	0.0071	0.0064
Mercury	10628-06-02 19:40 G	5603010.25	5603010.32	5603010.42	0.0071	0.0055
Mercury	10628-08-29 20:23 G	5603098.26	5603098.35	5603098.46	0.0071	0.0046
Mercury	10628-11-25 21:07 G	5603186.28	5603186.38	5603186.51	0.0071	0.0037
Mercury	10629-02-21 22:04 G	5603274.30	5603274.42	5603274.55	0.0071	0.0028
Mercury	10629-05-20 22:48 G	5603362.32	5603362.45	5603362.59	0.0071	0.0019
Mercury	10629-08-16 23:31 G	5603450.35	5603450.48	5603450.62	0.0072	0.0010
Mercury	10629-11-13 00:28 G	5603538.38	5603538.52	5603538.65	0.0072	0.0001
Mercury	10630-02-09 01:11 G	5603626.41	5603626.55	5603626.68	0.0072	0.0010
Mercury	10630-05-08 01:55 G	5603714.45	5603714.58	5603714.71	0.0072	0.0019
Mercury	10630-08-04 02:23 G	5603802.49	5603802.60	5603802.74	0.0072	0.0029

Mercury	10630-10-31 03:21 G	5603890.53	5603890.64	5603890.76	0.0072	0.0038
Mercury	10631-01-27 04:04 G	5603978.58	5603978.67	5603978.78	0.0072	0.0048
Mercury	10631-04-25 05:02 G	5604066.63	5604066.71	5604066.79	0.0072	0.0058
Mercury	10631-07-22 05:45 G	5604154.70	5604154.74	5604154.79	0.0073	0.0068
Earth	10700-11-06 14:09 G	5629463.83	5629464.09	5629464.36	0.0080	0.0001
Moon	10700-11-06 18:00 G	5629463.99	5629464.25	5629464.51	0.0080	0.0001 *
Venus	10706-08-26 08:38 G	5631582.85	5631582.86	5631582.93	0.0077	0.0076
Venus	10707-04-08 18:28 G	5631808.05	5631808.27	5631808.49	0.0077	0.0010
Venus	10707-11-20 03:07 G	5632033.48	5632033.63	5632033.80	0.0076	0.0054
Mercury	10713-10-28 06:28 G	5634202.68	5634202.77	5634202.90	0.0073	0.0060
Mercury	10714-01-24 08:52 G	5634290.74	5634290.87	5634291.03	0.0073	0.0046
Mercury	10714-04-22 11:31 G	5634378.81	5634378.98	5634379.15	0.0073	0.0032
Mercury	10714-07-19 13:26 G	5634466.89	5634467.06	5634467.25	0.0073	0.0019
Mercury	10714-10-15 15:50 G	5634554.97	5634555.16	5634555.35	0.0073	0.0005
Mercury	10715-01-11 18:00 G	5634643.06	5634643.25	5634643.44	0.0072	0.0008
Mercury	10715-04-09 20:09 G	5634731.16	5634731.34	5634731.52	0.0072	0.0022
Mercury	10715-07-06 21:50 G	5634819.27	5634819.41	5634819.59	0.0072	0.0036
Mercury	10715-10-03 00:00 G	5634907.38	5634907.50	5634907.66	0.0072	0.0048
Mercury	10715-12-30 02:09 G	5634995.51	5634995.59	5634995.71	0.0072	0.0061
Earth	10858-05-10 00:43 G	5686992.37	5686992.53	5686992.74	0.0064	0.0044
Moon	10858-05-10 02:52 G	5686992.47	5686992.62	5686992.82	0.0064	0.0046 *
Moon	10859-05-11 08:38 G	5687358.68	5687358.86	5687359.06	0.0064	0.0044
Earth	10859-05-11 11:45 G	5687358.84	5687358.99	5687359.21	0.0064	0.0045 *
Mars	10863-04-17 00:28 G	5688795.20	5688795.52	5688795.84	0.0066	0.0001
Venus	10867-07-11 22:33 G	5690342.27	5690342.44	5690342.63	0.0068	0.0039
Venus	10868-02-22 04:04 G	5690567.46	5690567.67	5690567.90	0.0068	0.0006
Venus	10868-10-04 09:21 G	5690792.75	5690792.89	5690793.05	0.0068	0.0050
Mercury	10874-10-23 06:57 G	5693002.77	5693002.79	5693002.84	0.0071	0.0069
Mercury	10875-01-19 07:40 G	5693090.76	5693090.82	5693090.91	0.0071	0.0060
Mercury	10875-04-17 08:23 G	5693178.77	5693178.85	5693178.96	0.0071	0.0051

Mercury	10875-07-14 09:21 G	5693266.79	5693266.89	5693267.00	0.0071	0.0042
Mercury	10875-10-10 10:04 G	5693354.81	5693354.92	5693355.05	0.0071	0.0033
Mercury	10876-01-06 10:48 G	5693442.83	5693442.95	5693443.08	0.0071	0.0024
Mercury	10876-04-03 11:31 G	5693530.86	5693530.98	5693531.12	0.0072	0.0015
Mercury	10876-06-30 12:28 G	5693618.88	5693619.02	5693619.16	0.0072	0.0005
Mercury	10876-09-26 13:11 G	5693706.92	5693707.05	5693707.19	0.0072	0.0005
Mercury	10876-12-23 13:55 G	5693794.95	5693795.08	5693795.22	0.0072	0.0014
Mercury	10877-03-21 14:38 G	5693882.99	5693883.11	5693883.24	0.0072	0.0024
Mercury	10877-06-17 15:21 G	5693971.03	5693971.14	5693971.27	0.0072	0.0033
Mercury	10877-09-13 16:04 G	5694059.07	5694059.17	5694059.29	0.0072	0.0043
Mercury	10877-12-10 17:02 G	5694147.12	5694147.21	5694147.31	0.0072	0.0053
Mercury	10878-03-08 17:45 G	5694235.18	5694235.24	5694235.31	0.0072	0.0063
Mercury	10878-06-04 18:43 G	5694323.28	5694323.28	5694323.28	0.0073	0.0073
Earth	10947-11-10 09:07 G	5719682.67	5719682.88	5719683.09	0.0080	0.0047
Moon	10947-11-10 11:45 G	5719682.81	5719682.99	5719683.20	0.0080	0.0051 *
Venus	10953-12-18 17:02 G	5721913.00	5721913.21	5721913.43	0.0077	0.0017
Venus	10954-08-01 01:55 G	5722138.42	5722138.58	5722138.76	0.0076	0.0048
Mercury	10960-06-14 16:33 G	5724283.12	5724283.19	5724283.29	0.0073	0.0065
Mercury	10960-09-10 18:57 G	5724371.17	5724371.29	5724371.44	0.0073	0.0051
Mercury	10960-12-07 21:21 G	5724459.23	5724459.39	5724459.56	0.0073	0.0037
Mercury	10961-03-05 23:16 G	5724547.31	5724547.47	5724547.66	0.0073	0.0024
Mercury	10961-06-02 01:40 G	5724635.39	5724635.57	5724635.76	0.0073	0.0010
Mercury	10961-08-29 04:04 G	5724723.48	5724723.67	5724723.86	0.0073	0.0004
Mercury	10961-11-25 06:00 G	5724811.58	5724811.75	5724811.94	0.0072	0.0017
Mercury	10962-02-21 08:09 G	5724899.68	5724899.84	5724900.02	0.0072	0.0031
Mercury	10962-05-20 10:19 G	5724987.79	5724987.93	5724988.09	0.0072	0.0044
Mercury	10962-08-16 12:00 G	5725075.91	5725076.00	5725076.14	0.0072	0.0057
Mercury	10962-11-12 14:09 G	5725164.07	5725164.09	5725164.16	0.0072	0.0070

# 12TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 12th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Earth	11105-05-14 19:26 G		5777211.06	5777211.31	5777211.57	0.0064	0.0009	
Moon	11105-05-14 19:55 G		5777211.09	5777211.33	5777211.58	0.0064	0.0011	*
Mars	11109-09-08 13:26 G		5778788.80	5778789.06	5778789.38	0.0066	0.0028	
Venus	11114-03-25 00:14 G		5780447.32	5780447.51	5780447.70	0.0068	0.0035	
Venus	11114-11-05 05:31 G		5780672.51	5780672.73	5780672.95	0.0068	0.0009	
Venus	11115-06-18 10:19 G		5780897.82	5780897.93	5780898.08	0.0068	0.0055	
Mercury	11121-06-11 19:55 G		5783083.31	5783083.33	5783083.38	0.0071	0.0068	
Mercury	11121-09-07 20:38 G		5783171.30	5783171.36	5783171.45	0.0071	0.0059	
Mercury	11121-12-04 21:21 G		5783259.31	5783259.39	5783259.50	0.0071	0.0050	
Mercury	11122-03-02 22:04 G		5783347.32	5783347.42	5783347.54	0.0071	0.0041	
Mercury	11122-05-29 23:02 G		5783435.34	5783435.46	5783435.58	0.0071	0.0032	
Mercury	11122-08-25 23:45 G		5783523.37	5783523.49	5783523.62	0.0071	0.0023	
Mercury	11122-11-22 00:28 G		5783611.39	5783611.52	5783611.66	0.0072	0.0014	
Mercury	11123-02-18 01:11 G		5783699.42	5783699.55	5783699.69	0.0072	0.0005	
Mercury	11123-05-17 02:09 G		5783787.45	5783787.59	5783787.72	0.0072	0.0006	
Mercury	11123-08-13 02:52 G		5783875.49	5783875.62	5783875.75	0.0072	0.0015	
Mercury	11123-11-09 03:36 G		5783963.52	5783963.65	5783963.78	0.0072	0.0024	
Mercury	11124-02-05 04:19 G		5784051.57	5784051.68	5784051.80	0.0072	0.0034	
Mercury	11124-05-03 04:48 G		5784139.61	5784139.70	5784139.82	0.0072	0.0045	



Mercury	11124-07-30 05:45 G	5784227.66	5784227.74	5784227.84	0.0072	0.0054
Mercury	11124-10-26 06:28 G	5784315.72	5784315.77	5784315.85	0.0072	0.0064
Earth	11193-11-12 03:21 G	5809534.48	5809534.64	5809534.80	0.0080	0.0064
Moon	11193-11-12 03:36 G	5809534.49	5809534.65	5809534.85	0.0080	0.0060 *
Mars	11197-04-08 13:55 G	5810777.81	5810778.08	5810778.39	0.0078	0.0029
Venus	11200-08-30 18:14 G	5812018.04	5812018.26	5812018.48	0.0077	0.0013
Venus	11201-04-13 02:52 G	5812243.47	5812243.62	5812243.80	0.0076	0.0052
Mercury	11207-02-01 03:50 G	5814363.59	5814363.66	5814363.76	0.0073	0.0065
Mercury	11207-04-30 06:00 G	5814451.63	5814451.75	5814451.90	0.0073	0.0051
Mercury	11207-07-27 08:23 G	5814539.70	5814539.85	5814540.02	0.0073	0.0037
Mercury	11207-10-23 10:48 G	5814627.77	5814627.95	5814628.13	0.0073	0.0023
Mercury	11208-01-19 12:57 G	5814715.86	5814716.04	5814716.23	0.0073	0.0010
Mercury	11208-04-16 15:07 G	5814803.95	5814804.13	5814804.32	0.0073	0.0005
Mercury	11208-07-13 17:16 G	5814892.04	5814892.22	5814892.41	0.0072	0.0018
Mercury	11208-10-09 19:40 G	5814980.15	5814980.32	5814980.49	0.0072	0.0031
Mercury	11209-01-05 21:21 G	5815068.26	5815068.39	5815068.55	0.0072	0.0044
Mercury	11209-04-03 23:31 G	5815156.38	5815156.48	5815156.61	0.0072	0.0057
Mercury	11209-07-01 01:40 G	5815244.54	5815244.57	5815244.62	0.0072	0.0070
Earth	11351-05-17 04:19 G	5867063.58	5867063.68	5867063.86	0.0064	0.0054
Moon	11351-05-17 08:09 G	5867063.73	5867063.84	5867063.97	0.0064	0.0056 *
Moon	11352-05-17 14:52 G	5867429.94	5867430.12	5867430.34	0.0064	0.0037
Earth	11352-05-17 16:33 G	5867429.97	5867430.19	5867430.41	0.0064	0.0034 *
Mars	11356-01-30 12:00 G	5868782.75	5868783.00	5868783.28	0.0066	0.0037
Venus	11360-12-04 02:52 G	5870552.42	5870552.62	5870552.84	0.0068	0.0024
Venus	11361-07-17 08:09 G	5870777.64	5870777.84	5870778.06	0.0068	0.0021
Venus	11362-02-27 13:26 G	5871003.03	5871003.06	5871003.13	0.0068	0.0066
Mercury	11368-01-28 09:36 G	5873163.85	5873163.90	5873163.97	0.0071	0.0063
Mercury	11368-04-25 10:19 G	5873251.86	5873251.93	5873252.03	0.0071	0.0054
Mercury	11368-07-22 11:02 G	5873339.87	5873339.96	5873340.07	0.0071	0.0045
Mercury	11368-10-18 11:45 G	5873427.88	5873427.99	5873428.12	0.0071	0.0036

Mercury	11369-01-14 12:43 G	5873515.91	5873516.03	5873516.16	0.0071	0.0027
Mercury	11369-04-12 13:26 G	5873603.93	5873604.06	5873604.19	0.0071	0.0018
Mercury	11369-07-09 14:09 G	5873691.96	5873692.09	5873692.23	0.0072	0.0008
Mercury	11369-10-05 14:52 G	5873779.99	5873780.12	5873780.26	0.0072	0.0002
Mercury	11370-01-01 15:36 G	5873868.02	5873868.15	5873868.29	0.0072	0.0011
Mercury	11370-03-30 16:19 G	5873956.06	5873956.18	5873956.32	0.0072	0.0020
Mercury	11370-06-26 17:02 G	5874044.10	5874044.21	5874044.34	0.0072	0.0030
Mercury	11370-09-22 18:00 G	5874132.14	5874132.25	5874132.36	0.0072	0.0039
Mercury	11370-12-19 18:28 G	5874220.18	5874220.27	5874220.38	0.0072	0.0050
Mercury	11371-03-17 19:11 G	5874308.24	5874308.30	5874308.39	0.0072	0.0060
Mercury	11371-06-13 20:09 G	5874396.31	5874396.34	5874396.39	0.0073	0.0069
Earth	11440-11-16 10:04 G	5899753.67	5899753.92	5899754.16	0.0080	0.0029
Moon	11440-11-16 12:14 G	5899753.78	5899754.01	5899754.28	0.0080	0.0026 *
Mars	11443-08-31 15:36 G	5900771.85	5900772.15	5900772.46	0.0079	0.0016
Venus	11446-09-30 14:23 G	5901897.96	5901898.10	5901898.26	0.0077	0.0057
Venus	11447-05-13 23:31 G	5902123.26	5902123.48	5902123.70	0.0076	0.0008
Venus	11447-12-25 08:09 G	5902348.79	5902348.84	5902348.92	0.0076	0.0072
Mercury	11453-06-23 14:23 G	5904356.08	5904356.10	5904356.18	0.0073	0.0071
Mercury	11453-09-19 16:48 G	5904444.10	5904444.20	5904444.35	0.0073	0.0056
Mercury	11453-12-16 19:11 G	5904532.16	5904532.30	5904532.47	0.0073	0.0042
Mercury	11454-03-14 21:36 G	5904620.24	5904620.40	5904620.59	0.0073	0.0028
Mercury	11454-06-11 00:00 G	5904708.32	5904708.50	5904708.69	0.0073	0.0014
Mercury	11454-09-07 02:23 G	5904796.41	5904796.60	5904796.79	0.0073	0.0001
Mercury	11454-12-04 04:19 G	5904884.50	5904884.68	5904884.87	0.0073	0.0014
Mercury	11455-03-02 06:43 G	5904972.60	5904972.78	5904972.95	0.0072	0.0027
Mercury	11455-05-29 08:23 G	5905060.71	5905060.85	5905061.02	0.0072	0.0041
Mercury	11455-08-25 10:48 G	5905148.83	5905148.95	5905149.08	0.0072	0.0053
Mercury	11455-11-21 13:11 G	5905236.98	5905237.05	5905237.11	0.0072	0.0067
Earth	11598-05-21 06:14 G	5957282.50	5957282.76	5957283.01	0.0064	0.0002
Moon	11598-05-21 09:50 G	5957282.65	5957282.91	5957283.17	0.0064	0.0005 *

Mars	11602-06-23 18:14 G	5958776.98	5958777.26	5958777.58	0.0066	0.0024
Venus	11607-01-04 03:50 G	5960432.51	5960432.66	5960432.83	0.0068	0.0046
Venus	11607-08-17 09:21 G	5960657.67	5960657.89	5960658.11	0.0068	0.0002
Venus	11608-03-29 14:09 G	5960882.95	5960883.09	5960883.28	0.0068	0.0044
Mercury	11614-03-23 22:48 G	5963068.45	5963068.45	5963068.46	0.0071	0.0071
Mercury	11614-06-19 23:16 G	5963156.42	5963156.47	5963156.55	0.0071	0.0062
Mercury	11614-09-16 00:00 G	5963244.43	5963244.50	5963244.61	0.0071	0.0053
Mercury	11614-12-13 00:43 G	5963332.44	5963332.53	5963332.65	0.0071	0.0045
Mercury	11615-03-11 01:55 G	5963420.46	5963420.58	5963420.69	0.0071	0.0035
Mercury	11615-06-07 02:23 G	5963508.48	5963508.60	5963508.73	0.0071	0.0026
Mercury	11615-09-03 03:07 G	5963596.51	5963596.63	5963596.77	0.0071	0.0017
Mercury	11615-11-30 04:04 G	5963684.53	5963684.67	5963684.80	0.0072	0.0007
Mercury	11616-02-26 04:48 G	5963772.56	5963772.70	5963772.83	0.0072	0.0003
Mercury	11616-05-24 05:31 G	5963860.60	5963860.73	5963860.86	0.0072	0.0012
Mercury	11616-08-20 06:14 G	5963948.63	5963948.76	5963948.89	0.0072	0.0022
Mercury	11616-11-16 06:57 G	5964036.67	5964036.79	5964036.92	0.0072	0.0031
Mercury	11617-02-12 07:40 G	5964124.72	5964124.82	5964124.94	0.0072	0.0041
Mercury	11617-05-11 08:38 G	5964212.76	5964212.86	5964212.96	0.0072	0.0051
Mercury	11617-08-07 09:07 G	5964300.82	5964300.88	5964300.97	0.0072	0.0061
Mercury	11617-11-03 09:50 G	5964388.90	5964388.91	5964388.95	0.0073	0.0071
Moon	11686-11-18 12:28 G	5989605.79	5989606.02	5989606.26	0.0080	0.0038
Earth	11686-11-18 15:50 G	5989605.94	5989606.16	5989606.40	0.0080	0.0038 *
Jupiter	11688-03-15 16:04 G	5990088.99	5990089.17	5990089.51	0.0080	0.0071
Mars	11690-01-22 01:40 G	5990766.31	5990766.57	5990766.88	0.0079	0.0031
Venus	11693-06-11 22:19 G	5992003.24	5992003.43	5992003.66	0.0077	0.0026
Venus	11694-01-23 07:26 G	5992228.63	5992228.81	5992229.01	0.0076	0.0040
Mercury	11699-11-13 02:38 G	5994348.57	5994348.61	5994348.69	0.0073	0.0069
Mercury	11700-02-09 04:48 G	5994436.60	5994436.70	5994436.85	0.0073	0.0055
Mercury	11700-05-08 07:11 G	5994524.66	5994524.80	5994524.97	0.0073	0.0041
Mercury	11700-08-04 09:36 G	5994612.73	5994612.90	5994613.09	0.0073	0.0027

Mercury	11700-10-31 12:00 G	5994700.82	5994701.00	5994701.19	0.0073	0.0013
Mercury	11701-01-27 14:23 G	5994788.91	5994789.10	5994789.29	0.0073	0.0002
Mercury	11701-04-25 16:19 G	5994877.00	5994877.18	5994877.37	0.0073	0.0015
Mercury	11701-07-22 18:43 G	5994965.10	5994965.28	5994965.45	0.0072	0.0028
Mercury	11701-10-18 20:38 G	5995053.22	5995053.36	5995053.52	0.0072	0.0041
Mercury	11702-01-14 22:48 G	5995141.34	5995141.45	5995141.58	0.0072	0.0055
Mercury	11702-04-13 00:28 G	5995229.49	5995229.52	5995229.61	0.0072	0.0068
Moon	11844-05-23 20:09 G	6047135.11	6047135.34	6047135.61	0.0064	0.0023
Earth	11844-05-23 21:36 G	6047135.17	6047135.40	6047135.65	0.0064	0.0024 *
Earth	11845-05-25 08:52 G	6047501.85	6047501.87	6047501.92	0.0064	0.0064
Moon	11845-05-25 11:16 G	6047501.94	6047501.97	6047502.06	0.0064	0.0063
Mars	11848-11-15 06:14 G	6048771.44	6048771.76	6048772.08	0.0066	0.0001
Venus	11853-02-03 05:45 G	6050312.69	6050312.74	6050312.84	0.0067	0.0064
Venus	11853-09-16 11:31 G	6050537.77	6050537.98	6050538.20	0.0068	0.0019
Venus	11854-04-29 16:33 G	6050763.00	6050763.19	6050763.41	0.0068	0.0026
Mercury	11860-08-13 12:57 G	6053061.01	6053061.04	6053061.09	0.0071	0.0067
Mercury	11860-11-09 13:40 G	6053149.00	6053149.07	6053149.15	0.0071	0.0058
Mercury	11861-02-05 14:23 G	6053237.01	6053237.10	6053237.20	0.0071	0.0049
Mercury	11861-05-04 15:07 G	6053325.03	6053325.13	6053325.25	0.0071	0.0040
Mercury	11861-07-31 15:50 G	6053413.04	6053413.16	6053413.29	0.0071	0.0031
Mercury	11861-10-27 16:48 G	6053501.07	6053501.20	6053501.32	0.0071	0.0022
Mercury	11862-01-23 17:31 G	6053589.09	6053589.23	6053589.36	0.0072	0.0013
Mercury	11862-04-21 18:14 G	6053677.12	6053677.26	6053677.39	0.0072	0.0003
Mercury	11862-07-18 18:57 G	6053765.15	6053765.29	6053765.42	0.0072	0.0006
Mercury	11862-10-14 19:40 G	6053853.19	6053853.32	6053853.45	0.0072	0.0016
Mercury	11863-01-10 20:23 G	6053941.23	6053941.35	6053941.48	0.0072	0.0025
Mercury	11863-04-08 21:07 G	6054029.27	6054029.38	6054029.50	0.0072	0.0035
Mercury	11863-07-05 21:36 G	6054117.31	6054117.40	6054117.52	0.0072	0.0045
Mercury	11863-10-01 22:33 G	6054205.36	6054205.44	6054205.53	0.0072	0.0055
Mercury	11863-12-28 23:16 G	6054293.42	6054293.47	6054293.54	0.0073	0.0065

Mars	11936-06-16 19:26 G	6080761.23	6080761.31	6080761.45	0.0078	0.0074
Venus	11939-07-14 00:14 G	6081883.35	6081883.51	6081883.69	0.0077	0.0047
Venus	11940-02-24 09:21 G	6082108.68	6082108.89	6082109.11	0.0076	0.0018
Mercury	11946-04-05 16:04 G	6084341.08	6084341.17	6084341.29	0.0073	0.0062
Mercury	11946-07-02 18:28 G	6084429.14	6084429.27	6084429.43	0.0073	0.0047
Mercury	11946-09-28 20:52 G	6084517.21	6084517.37	6084517.55	0.0073	0.0033
Mercury	11946-12-25 23:16 G	6084605.29	6084605.47	6084605.65	0.0073	0.0019
Mercury	11947-03-24 01:26 G	6084693.37	6084693.56	6084693.75	0.0073	0.0005
Mercury	11947-06-20 03:36 G	6084781.47	6084781.65	6084781.84	0.0073	0.0009
Mercury	11947-09-16 05:31 G	6084869.57	6084869.73	6084869.93	0.0072	0.0023
Mercury	11947-12-13 07:55 G	6084957.67	6084957.83	6084958.00	0.0072	0.0036
Mercury	11948-03-10 09:50 G	6085045.79	6085045.91	6085046.07	0.0072	0.0049
Mercury	11948-06-06 12:00 G	6085133.92	6085134.00	6085134.11	0.0072	0.0063

# 13TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 13th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Moon	12090-05-26 13:40 G		6136987.89	6136988.07	6136988.29	0.0064	0.0039	
Earth	12090-05-26 16:48 G		6136988.02	6136988.20	6136988.42	0.0064	0.0040	*
Earth	12091-05-28 03:50 G		6137354.51	6137354.66	6137354.86	0.0064	0.0048	
Moon	12091-05-28 04:48 G		6137354.55	6137354.70	6137354.91	0.0064	0.0048	*
Mars	12095-04-08 22:48 G		6138766.23	6138766.45	6138766.72	0.0066	0.0041	

Venus	12099-10-16 15:50 G	6140417.97	6140418.16	6140418.37	0.0068	0.0029
Venus	12100-05-29 21:07 G	6140643.18	6140643.38	6140643.61	0.0068	0.0017
Venus	12101-01-10 02:23 G	6140868.53	6140868.60	6140868.70	0.0068	0.0063
Mercury	12106-10-08 02:52 G	6142965.60	6142965.62	6142965.66	0.0071	0.0069
Mercury	12107-01-04 03:36 G	6143053.59	6143053.65	6143053.73	0.0071	0.0060
Mercury	12107-04-02 04:33 G	6143141.60	6143141.69	6143141.79	0.0071	0.0050
Mercury	12107-06-29 05:16 G	6143229.61	6143229.72	6143229.83	0.0071	0.0041
Mercury	12107-09-25 05:45 G	6143317.63	6143317.74	6143317.87	0.0071	0.0033
Mercury	12107-12-22 06:28 G	6143405.65	6143405.77	6143405.91	0.0071	0.0024
Mercury	12108-03-19 07:26 G	6143493.68	6143493.81	6143493.95	0.0072	0.0014
Mercury	12108-06-15 08:09 G	6143581.71	6143581.84	6143581.98	0.0072	0.0005
Mercury	12108-09-11 08:52 G	6143669.74	6143669.87	6143670.01	0.0072	0.0006
Mercury	12108-12-08 09:36 G	6143757.77	6143757.90	6143758.04	0.0072	0.0015
Mercury	12109-03-06 10:19 G	6143845.81	6143845.93	6143846.07	0.0072	0.0024
Mercury	12109-06-02 11:02 G	6143933.85	6143933.96	6143934.09	0.0072	0.0034
Mercury	12109-08-29 12:00 G	6144021.90	6144022.00	6144022.11	0.0072	0.0043
Mercury	12109-11-25 12:43 G	6144109.95	6144110.03	6144110.13	0.0072	0.0053
Mercury	12110-02-21 13:11 G	6144198.00	6144198.05	6144198.13	0.0072	0.0064
Moon	12179-11-26 20:23 G	6169678.19	6169678.35	6169678.57	0.0080	0.0054
Earth	12179-11-26 23:16 G	6169678.31	6169678.47	6169678.67	0.0080	0.0057 *
Venus	12185-08-12 04:04 G	6171763.55	6171763.67	6171763.81	0.0077	0.0061
Venus	12186-03-25 13:26 G	6171988.84	6171989.06	6171989.28	0.0077	0.0005
Venus	12186-11-05 22:04 G	6172214.34	6172214.42	6172214.52	0.0076	0.0070
Mercury	12192-05-29 04:19 G	6174245.60	6174245.68	6174245.79	0.0073	0.0064
Mercury	12192-08-25 06:43 G	6174333.65	6174333.78	6174333.93	0.0073	0.0049
Mercury	12192-11-21 08:52 G	6174421.72	6174421.87	6174422.05	0.0073	0.0035
Mercury	12193-02-17 11:16 G	6174509.79	6174509.97	6174510.16	0.0073	0.0021
Mercury	12193-05-16 13:40 G	6174597.88	6174598.07	6174598.26	0.0073	0.0007
Mercury	12193-08-12 15:50 G	6174685.97	6174686.16	6174686.35	0.0073	0.0007
Mercury	12193-11-08 17:45 G	6174774.07	6174774.24	6174774.44	0.0073	0.0021

Mercury	12194-02-04 19:55 G	6174862.18	6174862.33	6174862.51	0.0072	0.0034
Mercury	12194-05-03 22:04 G	6174950.29	6174950.42	6174950.58	0.0072	0.0048
Mercury	12194-07-31 00:28 G	6175038.43	6175038.52	6175038.63	0.0072	0.0061
Earth	12336-05-30 12:00 G	6226840.89	6226841.00	6226841.14	0.0064	0.0055
Moon	12336-05-30 14:09 G	6226841.00	6226841.09	6226841.25	0.0064	0.0056 *
Moon	12337-05-31 19:26 G	6227207.11	6227207.31	6227207.55	0.0064	0.0034
Earth	12337-05-31 23:31 G	6227207.26	6227207.48	6227207.71	0.0064	0.0032 *
Venus	12345-11-16 20:23 G	6230298.18	6230298.35	6230298.54	0.0068	0.0037
Venus	12346-06-30 01:55 G	6230523.36	6230523.58	6230523.80	0.0068	0.0008
Venus	12347-02-10 06:43 G	6230748.67	6230748.78	6230748.94	0.0068	0.0054
Mercury	12352-12-01 17:16 G	6232870.20	6232870.22	6232870.25	0.0071	0.0069
Mercury	12353-02-27 18:00 G	6232958.19	6232958.25	6232958.32	0.0071	0.0060
Mercury	12353-05-26 18:43 G	6233046.19	6233046.28	6233046.38	0.0071	0.0051
Mercury	12353-08-22 19:26 G	6233134.21	6233134.31	6233134.42	0.0071	0.0042
Mercury	12353-11-18 20:09 G	6233222.22	6233222.34	6233222.46	0.0071	0.0033
Mercury	12354-02-14 20:38 G	6233310.25	6233310.36	6233310.50	0.0071	0.0025
Mercury	12354-05-13 21:36 G	6233398.27	6233398.40	6233398.54	0.0072	0.0015
Mercury	12354-08-09 22:19 G	6233486.30	6233486.43	6233486.57	0.0072	0.0006
Mercury	12354-11-05 23:02 G	6233574.33	6233574.46	6233574.60	0.0072	0.0005
Mercury	12355-02-01 23:45 G	6233662.36	6233662.49	6233662.63	0.0072	0.0014
Mercury	12355-05-01 00:28 G	6233750.40	6233750.52	6233750.65	0.0072	0.0023
Mercury	12355-07-28 01:11 G	6233838.44	6233838.55	6233838.68	0.0072	0.0033
Mercury	12355-10-24 02:09 G	6233926.48	6233926.59	6233926.70	0.0072	0.0043
Mercury	12356-01-20 02:38 G	6234014.53	6234014.61	6234014.71	0.0072	0.0053
Mercury	12356-04-17 03:21 G	6234102.59	6234102.64	6234102.72	0.0072	0.0063
Mercury	12356-07-14 04:19 G	6234190.68	6234190.68	6234190.69	0.0073	0.0072
Earth	12425-11-29 16:04 G	6259530.94	6259531.17	6259531.42	0.0080	0.0030
Moon	12425-11-29 19:26 G	6259531.07	6259531.31	6259531.56	0.0080	0.0025 *
Venus	12431-09-12 08:23 G	6261643.79	6261643.85	6261643.96	0.0077	0.0071
Venus	12432-04-24 18:00 G	6261869.03	6261869.25	6261869.48	0.0077	0.0005

Venus	12432-12-06 02:23 G	6262094.49	6262094.60	6262094.75	0.0076	0.0061
Mercury	12438-07-23 16:48 G	6264150.12	6264150.20	6264150.31	0.0073	0.0064
Mercury	12438-10-19 18:57 G	6264238.17	6264238.29	6264238.45	0.0073	0.0050
Mercury	12439-01-15 21:21 G	6264326.24	6264326.39	6264326.58	0.0073	0.0035
Mercury	12439-04-13 23:45 G	6264414.32	6264414.49	6264414.69	0.0073	0.0021
Mercury	12439-07-11 02:09 G	6264502.41	6264502.59	6264502.79	0.0073	0.0007
Mercury	12439-10-07 04:19 G	6264590.50	6264590.68	6264590.88	0.0073	0.0008
Mercury	12440-01-03 06:28 G	6264678.60	6264678.77	6264678.96	0.0073	0.0021
Mercury	12440-03-31 08:52 G	6264766.71	6264766.87	6264767.04	0.0072	0.0035
Mercury	12440-06-27 10:48 G	6264854.82	6264854.95	6264855.10	0.0072	0.0049
Mercury	12440-09-23 13:11 G	6264942.96	6264943.05	6264943.15	0.0072	0.0062
Earth	12582-06-02 10:04 G	6316693.88	6316693.92	6316694.03	0.0064	0.0061
Moon	12582-06-02 12:14 G	6316693.97	6316694.01	6316694.08	0.0064	0.0062 *
Earth	12583-06-03 22:04 G	6317060.19	6317060.42	6317060.66	0.0064	0.0026
Moon	12583-06-03 22:33 G	6317060.24	6317060.44	6317060.68	0.0064	0.0029 *
Venus	12591-12-17 02:52 G	6320178.46	6320178.62	6320178.82	0.0068	0.0038
Venus	12592-07-29 08:23 G	6320403.64	6320403.85	6320404.08	0.0068	0.0008
Venus	12593-03-11 13:55 G	6320628.95	6320629.08	6320629.22	0.0068	0.0054
Mercury	12599-01-25 08:09 G	6322774.80	6322774.84	6322774.89	0.0071	0.0066
Mercury	12599-04-23 08:52 G	6322862.79	6322862.87	6322862.95	0.0071	0.0057
Mercury	12599-07-20 09:21 G	6322950.80	6322950.89	6322951.00	0.0071	0.0049
Mercury	12599-10-16 10:04 G	6323038.82	6323038.92	6323039.04	0.0071	0.0039
Mercury	12600-01-12 10:48 G	6323126.84	6323126.95	6323127.08	0.0071	0.0030
Mercury	12600-04-10 11:45 G	6323214.86	6323214.99	6323215.12	0.0071	0.0021
Mercury	12600-07-07 12:28 G	6323302.89	6323303.02	6323303.15	0.0072	0.0011
Mercury	12600-10-03 13:11 G	6323390.91	6323391.05	6323391.18	0.0072	0.0002
Mercury	12600-12-30 13:55 G	6323478.95	6323479.08	6323479.21	0.0072	0.0007
Mercury	12601-03-28 14:38 G	6323566.98	6323567.11	6323567.24	0.0072	0.0017
Mercury	12601-06-24 15:07 G	6323655.02	6323655.13	6323655.27	0.0072	0.0027
Mercury	12601-09-20 16:04 G	6323743.06	6323743.17	6323743.29	0.0072	0.0036



Mercury	12601-12-17 16:48 G	6323831.10	6323831.20	6323831.31	0.0072	0.0046
Mercury	12602-03-15 17:16 G	6323919.15	6323919.22	6323919.32	0.0072	0.0057
Mercury	12602-06-11 18:28 G	6324007.22	6324007.27	6324007.32	0.0072	0.0066
Earth	12671-12-03 11:16 G	6349383.72	6349383.97	6349384.24	0.0080	0.0013
Moon	12671-12-03 12:14 G	6349383.74	6349384.01	6349384.28	0.0080	0.0009 *
Venus	12677-10-12 14:52 G	6351524.09	6351524.12	6351524.21	0.0077	0.0074
Venus	12678-05-26 00:28 G	6351749.30	6351749.52	6351749.74	0.0077	0.0007
Venus	12679-01-06 08:52 G	6351974.75	6351974.87	6351975.03	0.0076	0.0059
Mercury	12684-09-16 06:00 G	6354054.66	6354054.75	6354054.88	0.0073	0.0060
Mercury	12684-12-13 08:38 G	6354142.72	6354142.86	6354143.01	0.0073	0.0046
Mercury	12685-03-11 10:48 G	6354230.79	6354230.95	6354231.13	0.0073	0.0032
Mercury	12685-06-07 13:11 G	6354318.87	6354319.05	6354319.24	0.0073	0.0017
Mercury	12685-09-03 15:36 G	6354406.96	6354407.15	6354407.34	0.0073	0.0003
Mercury	12685-11-30 17:45 G	6354495.05	6354495.24	6354495.43	0.0073	0.0011
Mercury	12686-02-26 19:55 G	6354583.16	6354583.33	6354583.51	0.0073	0.0025
Mercury	12686-05-25 21:50 G	6354671.27	6354671.41	6354671.59	0.0072	0.0039
Mercury	12686-08-22 00:28 G	6354759.39	6354759.52	6354759.65	0.0072	0.0052
Mercury	12686-11-18 02:09 G	6354847.53	6354847.59	6354847.69	0.0072	0.0066
Earth	12829-06-06 20:23 G	6406913.12	6406913.35	6406913.61	0.0064	0.0020
Moon	12829-06-06 23:45 G	6406913.26	6406913.49	6406913.75	0.0064	0.0024 *
Venus	12838-01-16 10:04 G	6410058.75	6410058.92	6410059.11	0.0068	0.0037
Venus	12838-08-29 15:36 G	6410283.93	6410284.15	6410284.37	0.0068	0.0008
Venus	12839-04-11 20:23 G	6410509.24	6410509.35	6410509.51	0.0068	0.0055
Mercury	12845-03-20 22:48 G	6412679.40	6412679.45	6412679.52	0.0071	0.0063
Mercury	12845-06-16 23:31 G	6412767.40	6412767.48	6412767.58	0.0071	0.0054
Mercury	12845-09-13 00:14 G	6412855.42	6412855.51	6412855.62	0.0071	0.0045
Mercury	12845-12-10 00:57 G	6412943.43	6412943.54	6412943.66	0.0071	0.0036
Mercury	12846-03-08 01:55 G	6413031.45	6413031.58	6413031.70	0.0071	0.0027
Mercury	12846-06-04 02:38 G	6413119.48	6413119.61	6413119.74	0.0071	0.0017
Mercury	12846-08-31 03:21 G	6413207.51	6413207.64	6413207.77	0.0072	0.0008

Mercury	12846-11-27 04:04 G	6413295.53	6413295.67	6413295.80	0.0072	0.0001
Mercury	12847-02-23 04:48 G	6413383.57	6413383.70	6413383.83	0.0072	0.0011
Mercury	12847-05-22 05:16 G	6413471.60	6413471.72	6413471.86	0.0072	0.0021
Mercury	12847-08-18 06:14 G	6413559.64	6413559.76	6413559.88	0.0072	0.0030
Mercury	12847-11-14 06:43 G	6413647.68	6413647.78	6413647.91	0.0072	0.0040
Mercury	12848-02-10 07:26 G	6413735.73	6413735.81	6413735.92	0.0072	0.0050
Mercury	12848-05-08 08:23 G	6413823.78	6413823.85	6413823.93	0.0072	0.0060
Mercury	12848-08-04 09:07 G	6413911.85	6413911.88	6413911.92	0.0072	0.0070
Moon	12917-12-06 04:48 G	6439236.44	6439236.70	6439236.96	0.0080	0.0003
Earth	12917-12-06 08:23 G	6439236.59	6439236.85	6439237.11	0.0080	0.0001 *
Venus	12923-11-12 22:33 G	6441404.39	6441404.44	6441404.52	0.0077	0.0073
Venus	12924-06-25 07:55 G	6441629.61	6441629.83	6441630.05	0.0077	0.0006
Venus	12925-02-05 16:19 G	6441855.06	6441855.18	6441855.34	0.0076	0.0060
Mercury	12930-08-14 17:31 G	6443871.18	6443871.23	6443871.31	0.0073	0.0069
Mercury	12930-11-10 19:40 G	6443959.21	6443959.32	6443959.47	0.0073	0.0055
Mercury	12931-02-06 22:04 G	6444047.28	6444047.42	6444047.60	0.0073	0.0040
Mercury	12931-05-06 00:43 G	6444135.35	6444135.53	6444135.71	0.0073	0.0025
Mercury	12931-08-02 03:07 G	6444223.44	6444223.63	6444223.81	0.0073	0.0011
Mercury	12931-10-29 05:16 G	6444311.53	6444311.72	6444311.91	0.0073	0.0003
Mercury	12932-01-25 07:26 G	6444399.63	6444399.81	6444400.00	0.0073	0.0017
Mercury	12932-04-22 09:21 G	6444487.73	6444487.89	6444488.08	0.0073	0.0031
Mercury	12932-07-19 11:31 G	6444575.85	6444575.98	6444576.15	0.0072	0.0045
Mercury	12932-10-15 13:55 G	6444663.98	6444664.08	6444664.20	0.0072	0.0058
Mercury	12933-01-11 15:50 G	6444752.15	6444752.16	6444752.21	0.0072	0.0072

# 14TH MILLENNIUM CE

**This is a list of transits visible from Pluto in the 14th millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Earth	13074-06-09 11:16	G	6496399.93	6496399.97	6496400.09	0.0064	0.0061	
Moon	13074-06-09 12:00	G	6496400.00	6496400.00	6496400.03	0.0064	0.0064	*
Moon	13075-06-10 20:38	G	6496766.15	6496766.36	6496766.62	0.0064	0.0029	
Earth	13075-06-10 23:31	G	6496766.24	6496766.48	6496766.71	0.0064	0.0026	*
Mars	13078-12-20 12:43	G	6498054.72	6498055.03	6498055.35	0.0066	0.0005	
Venus	13084-02-16 19:55	G	6499939.14	6499939.33	6499939.55	0.0068	0.0027	
Venus	13084-09-29 01:11	G	6500164.35	6500164.55	6500164.78	0.0068	0.0019	
Venus	13085-05-12 06:14	G	6500389.73	6500389.76	6500389.86	0.0068	0.0065	
Mercury	13091-02-16 13:40	G	6502496.03	6502496.07	6502496.14	0.0071	0.0064	
Mercury	13091-05-15 14:23	G	6502584.03	6502584.10	6502584.20	0.0071	0.0055	
Mercury	13091-08-11 15:21	G	6502672.04	6502672.14	6502672.24	0.0071	0.0045	
Mercury	13091-11-07 16:04	G	6502760.06	6502760.17	6502760.29	0.0071	0.0036	
Mercury	13092-02-03 16:33	G	6502848.08	6502848.19	6502848.32	0.0071	0.0028	
Mercury	13092-05-01 17:31	G	6502936.10	6502936.23	6502936.36	0.0071	0.0018	
Mercury	13092-07-28 18:14	G	6503024.13	6503024.26	6503024.39	0.0072	0.0009	
Mercury	13092-10-24 18:57	G	6503112.16	6503112.29	6503112.43	0.0072	0.0001	
Mercury	13093-01-20 19:40	G	6503200.19	6503200.32	6503200.45	0.0072	0.0010	
Mercury	13093-04-18 20:23	G	6503288.22	6503288.35	6503288.48	0.0072	0.0020	
Mercury	13093-07-15 20:52	G	6503376.26	6503376.37	6503376.51	0.0072	0.0030	
Mercury	13093-10-11 21:50	G	6503464.30	6503464.41	6503464.53	0.0072	0.0039	
Mercury	13094-01-07 22:33	G	6503552.35	6503552.44	6503552.55	0.0072	0.0049	
Mercury	13094-04-05 23:16	G	6503640.40	6503640.47	6503640.56	0.0072	0.0059	
Mercury	13094-07-02 23:45	G	6503728.47	6503728.49	6503728.55	0.0072	0.0070	
Earth	13163-12-10 11:16	G	6529089.71	6529089.97	6529090.23	0.0080	0.0008	
Moon	13163-12-10 12:14	G	6529089.76	6529090.01	6529090.26	0.0080	0.0007	*

Mars	13166-07-22 00:57 G	6530044.26	6530044.54	6530044.84	0.0079	0.0030
Venus	13169-12-13 08:09 G	6531284.74	6531284.84	6531285.01	0.0077	0.0061
Venus	13170-07-26 17:45 G	6531510.02	6531510.24	6531510.47	0.0077	0.0007
Venus	13171-03-09 02:09 G	6531735.55	6531735.59	6531735.69	0.0076	0.0072
Mercury	13176-07-12 06:00 G	6533687.73	6533687.75	6533687.82	0.0073	0.0072
Mercury	13176-10-08 08:38 G	6533775.75	6533775.86	6533775.99	0.0073	0.0057
Mercury	13177-01-04 10:48 G	6533863.81	6533863.95	6533864.12	0.0073	0.0043
Mercury	13177-04-02 13:11 G	6533951.89	6533952.05	6533952.24	0.0073	0.0028
Mercury	13177-06-29 15:36 G	6534039.97	6534040.15	6534040.35	0.0073	0.0014
Mercury	13177-09-25 18:00 G	6534128.06	6534128.25	6534128.44	0.0073	0.0001
Mercury	13177-12-22 20:09 G	6534216.16	6534216.34	6534216.53	0.0073	0.0015
Mercury	13178-03-20 22:19 G	6534304.26	6534304.43	6534304.61	0.0073	0.0029
Mercury	13178-06-17 00:14 G	6534392.38	6534392.51	6534392.69	0.0072	0.0043
Mercury	13178-09-13 02:52 G	6534480.50	6534480.62	6534480.74	0.0072	0.0056
Mercury	13178-12-10 04:48 G	6534568.66	6534568.70	6534568.76	0.0072	0.0069
Earth	13320-06-12 13:55 G	6586252.99	6586253.08	6586253.23	0.0064	0.0056
Moon	13320-06-12 17:16 G	6586253.15	6586253.22	6586253.34	0.0064	0.0059 *
Moon	13321-06-13 23:31 G	6586619.28	6586619.48	6586619.71	0.0064	0.0034
Earth	13321-06-14 01:40 G	6586619.36	6586619.57	6586619.82	0.0064	0.0031 *
Venus	13329-08-05 23:45 G	6589594.43	6589594.49	6589594.59	0.0067	0.0063
Venus	13330-03-19 05:16 G	6589819.52	6589819.72	6589819.95	0.0068	0.0018
Venus	13330-10-30 10:48 G	6590044.76	6590044.95	6590045.16	0.0068	0.0028
Mercury	13337-01-14 04:33 G	6592312.65	6592312.69	6592312.76	0.0071	0.0065
Mercury	13337-04-12 05:16 G	6592400.65	6592400.72	6592400.82	0.0071	0.0056
Mercury	13337-07-09 06:14 G	6592488.66	6592488.76	6592488.86	0.0071	0.0046
Mercury	13337-10-05 06:57 G	6592576.68	6592576.79	6592576.91	0.0071	0.0037
Mercury	13338-01-01 07:40 G	6592664.70	6592664.82	6592664.95	0.0071	0.0028
Mercury	13338-03-30 08:24 G	6592752.72	6592752.85	6592752.98	0.0071	0.0019
Mercury	13338-06-26 09:07 G	6592840.75	6592840.88	6592841.01	0.0072	0.0010
Mercury	13338-09-22 09:50 G	6592928.78	6592928.91	6592929.05	0.0072	0.0001

Mercury	13338-12-19 10:33 G	6593016.81	6593016.94	6593017.08	0.0072	0.0009
Mercury	13339-03-17 11:16 G	6593104.84	6593104.97	6593105.10	0.0072	0.0019
Mercury	13339-06-13 11:45 G	6593192.88	6593192.99	6593193.13	0.0072	0.0029
Mercury	13339-09-09 12:43 G	6593280.92	6593281.03	6593281.15	0.0072	0.0038
Mercury	13339-12-06 13:26 G	6593368.97	6593369.06	6593369.16	0.0072	0.0048
Mercury	13340-03-03 13:55 G	6593457.02	6593457.08	6593457.18	0.0072	0.0059
Mercury	13340-05-30 14:38 G	6593545.09	6593545.11	6593545.17	0.0072	0.0069
Earth	13409-12-13 14:09 G	6618942.85	6618943.09	6618943.36	0.0080	0.0020
Moon	13409-12-13 17:45 G	6618942.99	6618943.24	6618943.51	0.0080	0.0019 *
Venus	13416-01-13 19:26 G	6621165.14	6621165.31	6621165.50	0.0077	0.0045
Venus	13416-08-26 04:19 G	6621390.48	6621390.68	6621390.90	0.0077	0.0022
Mercury	13422-06-09 19:12 G	6623504.29	6623504.30	6623504.35	0.0073	0.0073
Mercury	13422-09-05 21:50 G	6623592.30	6623592.41	6623592.54	0.0073	0.0058
Mercury	13422-12-03 00:00 G	6623680.36	6623680.50	6623680.67	0.0073	0.0043
Mercury	13423-03-01 02:24 G	6623768.44	6623768.60	6623768.79	0.0073	0.0029
Mercury	13423-05-28 05:02 G	6623856.52	6623856.71	6623856.90	0.0073	0.0014
Mercury	13423-08-24 07:12 G	6623944.61	6623944.80	6623945.00	0.0073	0.0002
Mercury	13423-11-20 09:36 G	6624032.71	6624032.90	6624033.09	0.0073	0.0014
Mercury	13424-02-16 11:45 G	6624120.82	6624120.99	6624121.17	0.0073	0.0028
Mercury	13424-05-14 13:55 G	6624208.93	6624209.08	6624209.24	0.0072	0.0042
Mercury	13424-08-10 15:50 G	6624297.06	6624297.16	6624297.30	0.0072	0.0056
Mercury	13424-11-06 18:00 G	6624385.22	6624385.25	6624385.32	0.0072	0.0069
Moon	13566-06-16 16:48 G	6676106.05	6676106.20	6676106.42	0.0064	0.0046
Earth	13566-06-16 18:57 G	6676106.13	6676106.29	6676106.51	0.0064	0.0043 *
Earth	13567-06-18 06:28 G	6676472.61	6676472.77	6676472.99	0.0064	0.0045
Moon	13567-06-18 09:50 G	6676472.76	6676472.91	6676473.11	0.0064	0.0047 *
Venus	13575-09-06 11:45 G	6679474.83	6679474.99	6679475.16	0.0068	0.0045
Venus	13576-04-18 17:16 G	6679700.00	6679700.22	6679700.44	0.0068	0.0000
Venus	13576-11-29 22:19 G	6679925.28	6679925.43	6679925.60	0.0068	0.0047
Mercury	13582-09-15 19:40 G	6682041.32	6682041.32	6682041.34	0.0071	0.0071

Mercury	13582-12-12 20:09 G	6682129.29	6682129.34	6682129.42	0.0071	0.0062
Mercury	13583-03-10 20:52 G	6682217.30	6682217.37	6682217.48	0.0071	0.0053
Mercury	13583-06-06 21:50 G	6682305.31	6682305.41	6682305.52	0.0071	0.0044
Mercury	13583-09-02 22:33 G	6682393.33	6682393.44	6682393.56	0.0071	0.0034
Mercury	13583-11-29 23:16 G	6682481.35	6682481.47	6682481.60	0.0071	0.0025
Mercury	13584-02-26 00:00 G	6682569.37	6682569.50	6682569.63	0.0071	0.0016
Mercury	13584-05-24 00:43 G	6682657.40	6682657.53	6682657.67	0.0072	0.0006
Mercury	13584-08-20 01:26 G	6682745.43	6682745.56	6682745.70	0.0072	0.0003
Mercury	13584-11-16 02:09 G	6682833.46	6682833.59	6682833.72	0.0072	0.0013
Mercury	13585-02-12 02:38 G	6682921.49	6682921.61	6682921.75	0.0072	0.0023
Mercury	13585-05-11 03:36 G	6683009.53	6683009.65	6683009.77	0.0072	0.0032
Mercury	13585-08-07 04:04 G	6683097.58	6683097.67	6683097.79	0.0072	0.0043
Mercury	13585-11-03 05:16 G	6683185.62	6683185.72	6683185.81	0.0072	0.0052
Mercury	13586-01-30 05:45 G	6683273.68	6683273.74	6683273.82	0.0072	0.0062
Mercury	13586-04-28 06:28 G	6683361.76	6683361.77	6683361.80	0.0073	0.0072
Moon	13655-12-16 19:40 G	6708796.12	6708796.32	6708796.55	0.0080	0.0047
Earth	13655-12-16 21:36 G	6708796.22	6708796.40	6708796.64	0.0080	0.0047 *
Venus	13662-02-12 08:52 G	6711045.66	6711045.87	6711046.09	0.0077	0.0020
Venus	13662-09-25 17:31 G	6711271.08	6711271.23	6711271.43	0.0076	0.0047
Mercury	13668-05-06 09:21 G	6713320.84	6713320.89	6713320.98	0.0073	0.0068
Mercury	13668-08-02 12:00 G	6713408.88	6713409.00	6713409.14	0.0073	0.0053
Mercury	13668-10-29 14:09 G	6713496.94	6713497.09	6713497.27	0.0073	0.0039
Mercury	13669-01-25 16:48 G	6713585.02	6713585.20	6713585.38	0.0073	0.0024
Mercury	13669-04-23 19:12 G	6713673.11	6713673.30	6713673.49	0.0073	0.0010
Mercury	13669-07-20 21:21 G	6713761.20	6713761.39	6713761.58	0.0073	0.0004
Mercury	13669-10-16 23:31 G	6713849.30	6713849.48	6713849.67	0.0073	0.0018
Mercury	13670-01-13 01:26 G	6713937.41	6713937.56	6713937.75	0.0073	0.0033
Mercury	13670-04-11 03:36 G	6714025.53	6714025.65	6714025.82	0.0072	0.0047
Mercury	13670-07-08 06:14 G	6714113.66	6714113.76	6714113.87	0.0072	0.0060
Moon	13812-06-19 21:07 G	6765959.19	6765959.38	6765959.61	0.0064	0.0034

Earth	13812-06-19 23:02 G	6765959.27	6765959.46	6765959.71	0.0064	0.0033 *
Earth	13813-06-21 10:19 G	6766325.83	6766325.93	6766326.11	0.0064	0.0055
Moon	13813-06-21 11:16 G	6766325.87	6766325.97	6766326.14	0.0064	0.0056 *
Mars	13816-04-10 15:07 G	6767349.86	6767350.13	6767350.43	0.0065	0.0028
Venus	13821-10-06 22:33 G	6769355.26	6769355.44	6769355.65	0.0068	0.0031
Venus	13822-05-20 04:04 G	6769580.46	6769580.67	6769580.89	0.0068	0.0015
Venus	13822-12-31 09:21 G	6769805.81	6769805.89	6769805.99	0.0068	0.0062
Mercury	13828-08-13 10:48 G	6771857.94	6771857.95	6771857.99	0.0071	0.0070
Mercury	13828-11-09 11:45 G	6771945.93	6771945.99	6771946.06	0.0071	0.0060
Mercury	13829-02-05 12:28 G	6772033.93	6772034.02	6772034.11	0.0071	0.0051
Mercury	13829-05-04 12:57 G	6772121.94	6772122.04	6772122.16	0.0071	0.0042
Mercury	13829-07-31 13:40 G	6772209.96	6772210.07	6772210.20	0.0071	0.0033
Mercury	13829-10-27 14:38 G	6772297.98	6772298.11	6772298.24	0.0071	0.0024
Mercury	13830-01-23 15:21 G	6772386.01	6772386.14	6772386.27	0.0071	0.0014
Mercury	13830-04-21 16:04 G	6772474.03	6772474.17	6772474.30	0.0072	0.0005
Mercury	13830-07-18 16:48 G	6772562.06	6772562.20	6772562.33	0.0072	0.0005
Mercury	13830-10-14 17:31 G	6772650.10	6772650.23	6772650.36	0.0072	0.0014
Mercury	13831-01-10 18:00 G	6772738.13	6772738.25	6772738.39	0.0072	0.0024
Mercury	13831-04-08 18:57 G	6772826.17	6772826.29	6772826.41	0.0072	0.0033
Mercury	13831-07-05 19:40 G	6772914.22	6772914.32	6772914.43	0.0072	0.0043
Mercury	13831-10-01 20:09 G	6773002.26	6773002.34	6773002.44	0.0072	0.0054
Mercury	13831-12-28 20:52 G	6773090.32	6773090.37	6773090.45	0.0072	0.0064
Moon	13901-12-21 01:40 G	6798649.46	6798649.57	6798649.71	0.0080	0.0069
Earth	13901-12-21 04:19 G	6798649.54	6798649.68	6798649.83	0.0080	0.0066 *
Mars	13903-11-10 17:16 G	6799338.93	6799339.22	6799339.52	0.0079	0.0027
Venus	13907-08-03 11:31 G	6800700.89	6800700.98	6800701.13	0.0077	0.0065
Venus	13908-03-15 21:21 G	6800926.17	6800926.39	6800926.61	0.0077	0.0003
Venus	13908-10-27 05:45 G	6801151.67	6801151.74	6801151.86	0.0076	0.0070
Mercury	13914-04-04 23:02 G	6803137.40	6803137.46	6803137.57	0.0073	0.0066
Mercury	13914-07-02 01:40 G	6803225.44	6803225.57	6803225.72	0.0073	0.0051

Mercury	13914-09-28 03:50 G	6803313.51	6803313.66	6803313.85	0.0073	0.0037
Mercury	13914-12-25 06:28 G	6803401.59	6803401.77	6803401.96	0.0073	0.0021
Mercury	13915-03-23 08:52 G	6803489.68	6803489.87	6803490.06	0.0073	0.0007
Mercury	13915-06-19 11:16 G	6803577.78	6803577.97	6803578.16	0.0073	0.0007
Mercury	13915-09-15 13:12 G	6803665.88	6803666.05	6803666.24	0.0073	0.0022
Mercury	13915-12-12 15:21 G	6803753.99	6803754.14	6803754.32	0.0073	0.0036
Mercury	13916-03-09 17:31 G	6803842.11	6803842.23	6803842.39	0.0072	0.0050
Mercury	13916-06-05 20:09 G	6803930.25	6803930.34	6803930.43	0.0072	0.0063

# 15TH MILLENNIUM CE

**This is a list of transits visible from Pluto in the 15th millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Earth	14058-06-23 06:57 G		6855812.54	6855812.79	6855813.04	0.0064	0.0015	
Moon	14058-06-23 10:04 G		6855812.68	6855812.92	6855813.17	0.0064	0.0014	*
Venus	14067-03-26 06:28 G		6859010.64	6859010.77	6859010.90	0.0068	0.0054	
Venus	14067-11-06 11:31 G		6859235.77	6859235.98	6859236.21	0.0068	0.0009	
Venus	14068-06-18 16:33 G		6859461.03	6859461.19	6859461.40	0.0068	0.0038	
Mercury	14074-07-11 02:52 G		6861674.57	6861674.62	6861674.68	0.0071	0.0064	
Mercury	14074-10-07 03:36 G		6861762.57	6861762.65	6861762.74	0.0071	0.0055	
Mercury	14075-01-03 04:19 G		6861850.58	6861850.68	6861850.78	0.0071	0.0046	
Mercury	14075-04-01 04:48 G		6861938.60	6861938.70	6861938.83	0.0071	0.0037	
Mercury	14075-06-28 05:45 G		6862026.62	6862026.74	6862026.86	0.0071	0.0028	



Mercury	14075-09-24 06:28 G	6862114.64	6862114.77	6862114.90	0.0071	0.0018
Mercury	14075-12-21 07:12 G	6862202.67	6862202.80	6862202.93	0.0071	0.0009
Mercury	14076-03-18 07:55 G	6862290.70	6862290.83	6862290.96	0.0072	0.0001
Mercury	14076-06-14 08:38 G	6862378.73	6862378.86	6862378.99	0.0072	0.0010
Mercury	14076-09-10 09:07 G	6862466.76	6862466.88	6862467.02	0.0072	0.0020
Mercury	14076-12-07 10:04 G	6862554.80	6862554.92	6862555.04	0.0072	0.0029
Mercury	14077-03-05 10:33 G	6862642.84	6862642.94	6862643.06	0.0072	0.0039
Mercury	14077-06-01 11:16 G	6862730.88	6862730.97	6862731.08	0.0072	0.0049
Mercury	14077-08-28 12:14 G	6862818.94	6862819.01	6862819.09	0.0072	0.0059
Mercury	14077-11-24 12:57 G	6862907.00	6862907.04	6862907.08	0.0072	0.0069
Moon	14146-12-22 06:57 G	6888135.70	6888135.79	6888135.91	0.0080	0.0074
Earth	14146-12-22 09:07 G	6888135.78	6888135.88	6888136.03	0.0080	0.0071 *
Venus	14153-09-02 02:52 G	6890581.42	6890581.62	6890581.82	0.0077	0.0032
Venus	14154-04-15 11:31 G	6890806.80	6890806.98	6890807.19	0.0076	0.0035
Mercury	14159-12-04 11:45 G	6892865.98	6892865.99	6892866.05	0.0074	0.0073
Mercury	14160-03-01 14:09 G	6892953.99	6892954.09	6892954.23	0.0073	0.0058
Mercury	14160-05-28 16:48 G	6893042.06	6893042.20	6893042.37	0.0073	0.0043
Mercury	14160-08-24 19:12 G	6893130.13	6893130.30	6893130.49	0.0073	0.0028
Mercury	14160-11-20 21:21 G	6893218.22	6893218.39	6893218.59	0.0073	0.0014
Mercury	14161-02-17 00:00 G	6893306.31	6893306.50	6893306.69	0.0073	0.0001
Mercury	14161-05-16 02:09 G	6893394.41	6893394.59	6893394.78	0.0073	0.0015
Mercury	14161-08-12 04:04 G	6893482.51	6893482.67	6893482.86	0.0073	0.0030
Mercury	14161-11-08 06:14 G	6893570.63	6893570.76	6893570.93	0.0073	0.0044
Mercury	14162-02-04 08:24 G	6893658.76	6893658.85	6893658.99	0.0072	0.0058
Mercury	14162-05-03 11:02 G	6893746.93	6893746.96	6893747.00	0.0072	0.0071
Earth	14304-06-27 12:43 G	6945665.78	6945666.03	6945666.29	0.0064	0.0001
Moon	14304-06-27 13:40 G	6945665.80	6945666.07	6945666.33	0.0064	0.0001 *
Venus	14313-04-26 17:45 G	6948891.07	6948891.24	6948891.45	0.0068	0.0036
Venus	14313-12-07 23:16 G	6949116.26	6949116.47	6949116.70	0.0068	0.0011
Venus	14314-07-21 04:19 G	6949341.58	6949341.68	6949341.82	0.0068	0.0057

Mercury	14320-03-12 17:45 G	6951403.24	6951403.24	6951403.27	0.0071	0.0070
Mercury	14320-06-08 18:28 G	6951491.21	6951491.27	6951491.35	0.0071	0.0061
Mercury	14320-09-04 19:12 G	6951579.22	6951579.30	6951579.40	0.0071	0.0052
Mercury	14320-12-01 19:40 G	6951667.23	6951667.32	6951667.44	0.0071	0.0043
Mercury	14321-02-27 20:38 G	6951755.25	6951755.36	6951755.48	0.0071	0.0034
Mercury	14321-05-26 21:21 G	6951843.27	6951843.39	6951843.52	0.0071	0.0024
Mercury	14321-08-22 22:04 G	6951931.29	6951931.42	6951931.55	0.0071	0.0015
Mercury	14321-11-18 22:48 G	6952019.32	6952019.45	6952019.58	0.0072	0.0005
Mercury	14322-02-14 23:31 G	6952107.35	6952107.48	6952107.61	0.0072	0.0004
Mercury	14322-05-14 00:14 G	6952195.38	6952195.51	6952195.64	0.0072	0.0014
Mercury	14322-08-10 00:57 G	6952283.41	6952283.54	6952283.67	0.0072	0.0023
Mercury	14322-11-06 01:26 G	6952371.45	6952371.56	6952371.69	0.0072	0.0033
Mercury	14323-02-02 02:09 G	6952459.49	6952459.59	6952459.71	0.0072	0.0043
Mercury	14323-05-01 03:07 G	6952547.54	6952547.63	6952547.72	0.0072	0.0053
Mercury	14323-07-28 03:50 G	6952635.60	6952635.66	6952635.73	0.0072	0.0063
Moon	14392-12-25 16:04 G	6977988.97	6977989.17	6977989.38	0.0080	0.0046
Earth	14392-12-25 18:00 G	6977989.04	6977989.25	6977989.48	0.0080	0.0042 *
Venus	14399-02-20 07:12 G	6980236.74	6980236.80	6980236.89	0.0077	0.0072
Venus	14399-10-03 16:33 G	6980461.97	6980462.19	6980462.41	0.0077	0.0004
Venus	14400-05-16 00:57 G	6980687.44	6980687.54	6980687.69	0.0076	0.0063
Mercury	14405-11-01 02:24 G	6982682.53	6982682.60	6982682.69	0.0073	0.0067
Mercury	14406-01-28 05:02 G	6982770.58	6982770.71	6982770.85	0.0073	0.0052
Mercury	14406-04-26 06:57 G	6982858.64	6982858.79	6982858.97	0.0073	0.0038
Mercury	14406-07-23 09:36 G	6982946.72	6982946.90	6982947.09	0.0073	0.0022
Mercury	14406-10-19 12:00 G	6983034.81	6983035.00	6983035.19	0.0073	0.0008
Mercury	14407-01-15 14:09 G	6983122.91	6983123.09	6983123.29	0.0073	0.0007
Mercury	14407-04-13 16:33 G	6983211.01	6983211.19	6983211.38	0.0073	0.0021
Mercury	14407-07-10 18:43 G	6983299.12	6983299.28	6983299.46	0.0073	0.0035
Mercury	14407-10-06 21:07 G	6983387.24	6983387.38	6983387.52	0.0073	0.0049
Mercury	14408-01-02 23:16 G	6983475.38	6983475.47	6983475.57	0.0072	0.0063

Earth	14549-06-29 09:07 G	7035152.87	7035152.88	7035152.96	0.0064	0.0063
Moon	14550-06-30 17:45 G	7035519.01	7035519.24	7035519.48	0.0064	0.0026
Earth	14550-06-30 21:07 G	7035519.16	7035519.38	7035519.64	0.0064	0.0023 *
Mars	14553-07-31 12:28 G	7036645.71	7036646.02	7036646.34	0.0065	0.0003
Venus	14558-10-14 02:52 G	7038546.50	7038546.62	7038546.76	0.0068	0.0054
Venus	14559-05-27 08:24 G	7038771.63	7038771.85	7038772.07	0.0068	0.0008
Venus	14560-01-07 13:26 G	7038996.89	7038997.06	7038997.25	0.0068	0.0038
Mercury	14566-02-07 09:50 G	7041219.87	7041219.91	7041219.99	0.0071	0.0063
Mercury	14566-05-06 10:33 G	7041307.87	7041307.94	7041308.04	0.0071	0.0054
Mercury	14566-08-02 11:31 G	7041395.88	7041395.98	7041396.09	0.0071	0.0044
Mercury	14566-10-29 12:14 G	7041483.90	7041484.01	7041484.13	0.0071	0.0035
Mercury	14567-01-25 12:43 G	7041571.92	7041572.03	7041572.17	0.0071	0.0027
Mercury	14567-04-23 13:40 G	7041659.94	7041660.07	7041660.20	0.0071	0.0017
Mercury	14567-07-20 14:24 G	7041747.97	7041748.10	7041748.24	0.0071	0.0007
Mercury	14567-10-16 15:07 G	7041836.00	7041836.13	7041836.27	0.0072	0.0003
Mercury	14568-01-12 15:50 G	7041924.03	7041924.16	7041924.29	0.0072	0.0012
Mercury	14568-04-09 16:33 G	7042012.06	7042012.19	7042012.32	0.0072	0.0022
Mercury	14568-07-06 17:16 G	7042100.10	7042100.22	7042100.34	0.0072	0.0031
Mercury	14568-10-02 18:00 G	7042188.14	7042188.25	7042188.36	0.0072	0.0041
Mercury	14568-12-29 18:28 G	7042276.19	7042276.27	7042276.38	0.0072	0.0052
Mercury	14569-03-27 19:12 G	7042364.24	7042364.30	7042364.38	0.0072	0.0061
Mercury	14569-06-23 19:55 G	7042452.32	7042452.33	7042452.37	0.0072	0.0071
Earth	14638-12-30 07:40 G	7067842.56	7067842.82	7067843.08	0.0080	0.0005
Moon	14638-12-30 10:48 G	7067842.69	7067842.95	7067843.21	0.0080	0.0001 *
Mars	14641-03-01 06:57 G	7068634.47	7068634.79	7068635.11	0.0079	0.0003
Venus	14645-03-22 23:31 G	7070117.30	7070117.48	7070117.70	0.0077	0.0033
Venus	14645-11-03 08:38 G	7070342.68	7070342.86	7070343.07	0.0077	0.0035
Mercury	14651-07-03 15:36 G	7072411.11	7072411.15	7072411.22	0.0074	0.0070
Mercury	14651-09-29 17:45 G	7072499.14	7072499.24	7072499.39	0.0073	0.0056
Mercury	14651-12-26 20:24 G	7072587.20	7072587.35	7072587.52	0.0073	0.0040

Mercury	14652-03-23 23:02 G	7072675.28	7072675.46	7072675.64	0.0073	0.0025
Mercury	14652-06-20 01:12 G	7072763.37	7072763.55	7072763.75	0.0073	0.0011
Mercury	14652-09-16 03:36 G	7072851.46	7072851.65	7072851.84	0.0073	0.0004
Mercury	14652-12-13 05:45 G	7072939.56	7072939.74	7072939.93	0.0073	0.0018
Mercury	14653-03-11 08:09 G	7073027.67	7073027.84	7073028.02	0.0073	0.0032
Mercury	14653-06-07 10:04 G	7073115.79	7073115.92	7073116.09	0.0073	0.0047
Mercury	14653-09-03 12:14 G	7073203.93	7073204.01	7073204.14	0.0072	0.0061
Earth	14795-07-03 17:31 G	7125006.05	7125006.23	7125006.43	0.0064	0.0043
Moon	14795-07-03 19:26 G	7125006.13	7125006.31	7125006.50	0.0064	0.0046 *
Earth	14796-07-04 05:02 G	7125372.53	7125372.71	7125372.91	0.0064	0.0043
Moon	14796-07-04 05:31 G	7125372.57	7125372.73	7125372.92	0.0064	0.0046 *
Venus	14804-11-13 16:19 G	7128426.98	7128427.18	7128427.38	0.0068	0.0030
Venus	14805-06-26 21:36 G	7128652.19	7128652.40	7128652.61	0.0068	0.0016
Venus	14806-02-07 02:24 G	7128877.54	7128877.60	7128877.70	0.0068	0.0063
Mercury	14811-10-10 01:26 G	7130948.52	7130948.56	7130948.61	0.0071	0.0066
Mercury	14812-01-06 01:55 G	7131036.52	7131036.58	7131036.67	0.0071	0.0057
Mercury	14812-04-03 02:38 G	7131124.52	7131124.61	7131124.72	0.0071	0.0048
Mercury	14812-06-30 03:21 G	7131212.54	7131212.64	7131212.76	0.0071	0.0039
Mercury	14812-09-26 04:04 G	7131300.56	7131300.67	7131300.80	0.0071	0.0030
Mercury	14812-12-23 04:48 G	7131388.58	7131388.70	7131388.83	0.0071	0.0020
Mercury	14813-03-21 05:31 G	7131476.60	7131476.73	7131476.87	0.0071	0.0011
Mercury	14813-06-17 06:14 G	7131564.63	7131564.76	7131564.90	0.0072	0.0003
Mercury	14813-09-13 06:57 G	7131652.66	7131652.79	7131652.93	0.0072	0.0009
Mercury	14813-12-10 07:40 G	7131740.69	7131740.82	7131740.95	0.0072	0.0018
Mercury	14814-03-08 08:24 G	7131828.73	7131828.85	7131828.98	0.0072	0.0028
Mercury	14814-06-04 09:07 G	7131916.77	7131916.88	7131917.00	0.0072	0.0037
Mercury	14814-08-31 09:50 G	7132004.82	7132004.91	7132005.02	0.0072	0.0047
Mercury	14814-11-27 10:33 G	7132092.87	7132092.94	7132093.03	0.0072	0.0057
Mercury	14815-02-23 11:02 G	7132180.93	7132180.96	7132181.03	0.0072	0.0068
Earth	14885-01-01 18:43 G	7157696.07	7157696.28	7157696.51	0.0080	0.0043

Moon	14885-01-01 19:26 G	7157696.10	7157696.31	7157696.57	0.0080	0.0040	*
Venus	14890-09-09 05:31 G	7159772.63	7159772.73	7159772.85	0.0077	0.0066	
Venus	14891-04-22 14:52 G	7159997.90	7159998.12	7159998.34	0.0077	0.0002	
Venus	14891-12-03 23:16 G	7160223.40	7160223.47	7160223.59	0.0076	0.0070	
Mercury	14897-05-30 06:43 G	7162227.69	7162227.78	7162227.91	0.0073	0.0061	
Mercury	14897-08-26 09:21 G	7162315.75	7162315.89	7162316.05	0.0073	0.0046	
Mercury	14897-11-22 11:31 G	7162403.82	7162403.98	7162404.17	0.0073	0.0031	
Mercury	14898-02-18 14:09 G	7162491.90	7162492.09	7162492.28	0.0073	0.0016	
Mercury	14898-05-17 16:33 G	7162580.00	7162580.19	7162580.38	0.0073	0.0002	
Mercury	14898-08-13 18:43 G	7162668.10	7162668.28	7162668.47	0.0073	0.0013	
Mercury	14898-11-09 20:52 G	7162756.20	7162756.37	7162756.56	0.0073	0.0027	
Mercury	14899-02-05 22:48 G	7162844.32	7162844.45	7162844.63	0.0073	0.0042	
Mercury	14899-05-05 01:12 G	7162932.45	7162932.55	7162932.69	0.0072	0.0056	
Mercury	14899-08-01 03:21 G	7163020.61	7163020.64	7163020.72	0.0072	0.0070	

# 16TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 16th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Moon	15041-07-07 00:14 G		7214859.27	7214859.51	7214859.77	0.0064	0.0020	
Earth	15041-07-07 03:36 G		7214859.42	7214859.65	7214859.91	0.0064	0.0017	*
Mars	15044-06-27 22:19 G		7215946.29	7215946.43	7215946.64	0.0065	0.0055	
Venus	15050-05-04 01:26 G		7218082.42	7218082.56	7218082.74	0.0068	0.0046	

Venus	15050-12-15 07:12 G	7218307.58	7218307.80	7218308.02	0.0068	0.0001
Venus	15051-07-28 11:45 G	7218532.87	7218532.99	7218533.18	0.0068	0.0049
Mercury	15057-06-10 17:16 G	7220677.18	7220677.22	7220677.27	0.0071	0.0066
Mercury	15057-09-06 17:45 G	7220765.18	7220765.24	7220765.33	0.0071	0.0057
Mercury	15057-12-03 18:28 G	7220853.18	7220853.27	7220853.38	0.0071	0.0048
Mercury	15058-03-01 19:26 G	7220941.20	7220941.31	7220941.42	0.0071	0.0038
Mercury	15058-05-28 19:55 G	7221029.22	7221029.33	7221029.46	0.0071	0.0030
Mercury	15058-08-24 20:38 G	7221117.24	7221117.36	7221117.50	0.0071	0.0020
Mercury	15058-11-20 21:21 G	7221205.26	7221205.39	7221205.53	0.0071	0.0011
Mercury	15059-02-16 22:04 G	7221293.29	7221293.42	7221293.56	0.0072	0.0003
Mercury	15059-05-15 22:48 G	7221381.32	7221381.45	7221381.59	0.0072	0.0009
Mercury	15059-08-11 23:31 G	7221469.36	7221469.48	7221469.61	0.0072	0.0018
Mercury	15059-11-08 00:14 G	7221557.39	7221557.51	7221557.64	0.0072	0.0028
Mercury	15060-02-04 00:43 G	7221645.43	7221645.53	7221645.66	0.0072	0.0039
Mercury	15060-05-02 01:55 G	7221733.48	7221733.58	7221733.68	0.0072	0.0048
Mercury	15060-07-29 02:24 G	7221821.53	7221821.60	7221821.69	0.0072	0.0058
Mercury	15060-10-25 03:07 G	7221909.59	7221909.63	7221909.68	0.0072	0.0068
Earth	15130-01-05 05:02 G	7247182.65	7247182.71	7247182.84	0.0080	0.0075
Moon	15130-01-05 08:38 G	7247182.75	7247182.86	7247182.98	0.0080	0.0071 *
Venus	15136-10-10 23:31 G	7249653.27	7249653.48	7249653.70	0.0077	0.0020
Venus	15137-05-24 08:24 G	7249878.69	7249878.85	7249879.03	0.0076	0.0048
Mercury	15143-01-30 20:52 G	7251956.28	7251956.37	7251956.49	0.0073	0.0061
Mercury	15143-04-28 23:16 G	7252044.33	7252044.47	7252044.63	0.0073	0.0046
Mercury	15143-07-26 01:55 G	7252132.41	7252132.58	7252132.76	0.0073	0.0031
Mercury	15143-10-22 04:04 G	7252220.49	7252220.67	7252220.87	0.0073	0.0016
Mercury	15144-01-18 06:43 G	7252308.58	7252308.78	7252308.97	0.0073	0.0002
Mercury	15144-04-15 08:52 G	7252396.68	7252396.87	7252397.06	0.0073	0.0013
Mercury	15144-07-12 11:02 G	7252484.79	7252484.96	7252485.15	0.0073	0.0028
Mercury	15144-10-08 13:12 G	7252572.91	7252573.05	7252573.22	0.0073	0.0042
Mercury	15145-01-04 15:36 G	7252661.04	7252661.15	7252661.28	0.0073	0.0056

Mercury	15145-04-02 18:00 G	7252749.20	7252749.25	7252749.30	0.0072	0.0070
Moon	15287-07-10 11:02 G	7304712.71	7304712.96	7304713.21	0.0064	0.0001
Earth	15287-07-10 11:45 G	7304712.73	7304712.99	7304713.24	0.0064	0.0004 *
Mars	15290-11-20 18:00 G	7305942.11	7305942.25	7305942.44	0.0065	0.0055
Venus	15295-10-21 09:36 G	7307737.87	7307737.90	7307737.97	0.0067	0.0066
Venus	15296-06-02 15:07 G	7307962.93	7307963.13	7307963.35	0.0068	0.0020
Venus	15297-01-13 20:09 G	7308188.16	7308188.34	7308188.56	0.0068	0.0027
Mercury	15303-02-10 08:38 G	7310405.84	7310405.86	7310405.90	0.0071	0.0069
Mercury	15303-05-09 09:07 G	7310493.83	7310493.88	7310493.97	0.0071	0.0060
Mercury	15303-08-05 09:50 G	7310581.83	7310581.91	7310582.02	0.0071	0.0051
Mercury	15303-11-01 10:48 G	7310669.85	7310669.95	7310670.06	0.0071	0.0041
Mercury	15304-01-28 11:31 G	7310757.86	7310757.98	7310758.10	0.0071	0.0032
Mercury	15304-04-25 12:14 G	7310845.88	7310846.01	7310846.14	0.0071	0.0023
Mercury	15304-07-22 12:57 G	7310933.91	7310934.04	7310934.17	0.0071	0.0013
Mercury	15304-10-18 13:40 G	7311021.94	7311022.07	7311022.20	0.0071	0.0004
Mercury	15305-01-14 14:24 G	7311109.96	7311110.10	7311110.23	0.0072	0.0006
Mercury	15305-04-12 14:52 G	7311198.00	7311198.12	7311198.26	0.0072	0.0016
Mercury	15305-07-09 15:36 G	7311286.03	7311286.15	7311286.28	0.0072	0.0025
Mercury	15305-10-05 16:19 G	7311374.07	7311374.18	7311374.30	0.0072	0.0035
Mercury	15306-01-01 16:48 G	7311462.11	7311462.20	7311462.32	0.0072	0.0045
Mercury	15306-03-30 17:45 G	7311550.16	7311550.24	7311550.33	0.0072	0.0055
Mercury	15306-06-26 18:28 G	7311638.22	7311638.27	7311638.33	0.0072	0.0065
Earth	15376-01-08 17:16 G	7337035.99	7337036.22	7337036.46	0.0080	0.0034
Moon	15376-01-08 18:57 G	7337036.06	7337036.29	7337036.56	0.0080	0.0032 *
Jupiter	15377-05-01 22:33 G	7337515.14	7337515.44	7337515.88	0.0080	0.0061
Mars	15378-06-21 08:38 G	7337930.78	7337930.86	7337930.97	0.0079	0.0075
Venus	15382-03-30 05:45 G	7339308.59	7339308.74	7339308.91	0.0077	0.0051
Venus	15382-11-10 15:07 G	7339533.91	7339534.13	7339534.35	0.0077	0.0017
Mercury	15388-09-30 09:36 G	7341684.83	7341684.90	7341685.00	0.0074	0.0066
Mercury	15388-12-27 12:00 G	7341772.88	7341773.00	7341773.16	0.0073	0.0051

Mercury	15389-03-25 14:38 G	7341860.95	7341861.11	7341861.28	0.0073	0.0036
Mercury	15389-06-21 16:48 G	7341949.03	7341949.20	7341949.40	0.0073	0.0021
Mercury	15389-09-17 19:26 G	7342037.12	7342037.31	7342037.50	0.0073	0.0006
Mercury	15389-12-14 21:36 G	7342125.22	7342125.40	7342125.60	0.0073	0.0009
Mercury	15390-03-13 00:00 G	7342213.32	7342213.50	7342213.69	0.0073	0.0023
Mercury	15390-06-09 01:55 G	7342301.44	7342301.58	7342301.77	0.0073	0.0038
Mercury	15390-09-05 04:19 G	7342389.56	7342389.68	7342389.83	0.0073	0.0052
Mercury	15390-12-02 06:43 G	7342477.71	7342477.78	7342477.87	0.0072	0.0066
Moon	15532-07-13 05:02 G	7394199.62	7394199.71	7394199.88	0.0064	0.0056
Earth	15532-07-13 08:24 G	7394199.78	7394199.85	7394199.98	0.0064	0.0059 *
Earth	15533-07-14 20:24 G	7394566.12	7394566.35	7394566.59	0.0064	0.0027
Moon	15533-07-14 23:45 G	7394566.27	7394566.49	7394566.75	0.0064	0.0024 *
Venus	15541-11-22 00:00 G	7397618.33	7397618.50	7397618.70	0.0068	0.0038
Venus	15542-07-05 05:31 G	7397843.51	7397843.73	7397843.95	0.0068	0.0009
Venus	15543-02-15 10:19 G	7398068.83	7398068.93	7398069.07	0.0068	0.0057
Mercury	15548-10-12 00:28 G	7400134.51	7400134.52	7400134.53	0.0071	0.0070
Mercury	15549-01-08 00:57 G	7400222.48	7400222.54	7400222.61	0.0071	0.0061
Mercury	15549-04-06 01:40 G	7400310.49	7400310.57	7400310.66	0.0071	0.0052
Mercury	15549-07-03 02:09 G	7400398.50	7400398.59	7400398.71	0.0071	0.0043
Mercury	15549-09-29 03:07 G	7400486.51	7400486.63	7400486.75	0.0071	0.0033
Mercury	15549-12-26 03:36 G	7400574.53	7400574.65	7400574.79	0.0071	0.0025
Mercury	15550-03-24 04:33 G	7400662.56	7400662.69	7400662.82	0.0071	0.0015
Mercury	15550-06-20 05:16 G	7400750.58	7400750.72	7400750.85	0.0071	0.0006
Mercury	15550-09-16 06:00 G	7400838.61	7400838.75	7400838.88	0.0072	0.0005
Mercury	15550-12-13 06:43 G	7400926.64	7400926.78	7400926.91	0.0072	0.0014
Mercury	15551-03-11 07:12 G	7401014.68	7401014.80	7401014.93	0.0072	0.0024
Mercury	15551-06-07 07:40 G	7401102.72	7401102.82	7401102.95	0.0072	0.0034
Mercury	15551-09-03 08:38 G	7401190.76	7401190.86	7401190.97	0.0072	0.0043
Mercury	15551-11-30 09:21 G	7401278.81	7401278.89	7401278.98	0.0072	0.0053
Mercury	15552-02-26 09:50 G	7401366.86	7401366.91	7401366.99	0.0072	0.0064



Moon	15622-01-12 04:19 G	7426889.43	7426889.68	7426889.95	0.0080	0.0017
Earth	15622-01-12 07:40 G	7426889.58	7426889.82	7426890.09	0.0080	0.0017 *
Venus	15627-09-17 13:40 G	7428964.07	7428964.07	7428964.09	0.0077	0.0077
Venus	15628-04-29 23:02 G	7429189.24	7429189.46	7429189.68	0.0077	0.0008
Venus	15628-12-11 07:55 G	7429414.70	7429414.83	7429414.97	0.0076	0.0060
Mercury	15634-06-01 23:31 G	7431413.41	7431413.48	7431413.56	0.0074	0.0067
Mercury	15634-08-29 01:55 G	7431501.45	7431501.58	7431501.72	0.0073	0.0052
Mercury	15634-11-25 03:50 G	7431589.52	7431589.66	7431589.85	0.0073	0.0038
Mercury	15635-02-21 06:28 G	7431677.60	7431677.77	7431677.97	0.0073	0.0022
Mercury	15635-05-20 09:07 G	7431765.69	7431765.88	7431766.07	0.0073	0.0007
Mercury	15635-08-16 11:16 G	7431853.78	7431853.97	7431854.17	0.0073	0.0008
Mercury	15635-11-12 13:40 G	7431941.89	7431942.07	7431942.26	0.0073	0.0022
Mercury	15636-02-08 15:36 G	7432030.00	7432030.15	7432030.34	0.0073	0.0037
Mercury	15636-05-06 18:00 G	7432118.13	7432118.25	7432118.40	0.0073	0.0051
Mercury	15636-08-02 20:09 G	7432206.27	7432206.34	7432206.44	0.0072	0.0065
Moon	15778-07-16 14:24 G	7484052.92	7484053.10	7484053.30	0.0064	0.0041
Earth	15778-07-16 14:38 G	7484052.95	7484053.11	7484053.33	0.0064	0.0044 *
Moon	15779-07-18 01:26 G	7484419.37	7484419.56	7484419.79	0.0064	0.0040
Earth	15779-07-18 01:55 G	7484419.42	7484419.58	7484419.81	0.0064	0.0043 *
Mars	15781-10-18 04:04 G	7485242.38	7485242.67	7485242.98	0.0065	0.0013
Venus	15787-05-11 06:43 G	7487273.72	7487273.78	7487273.89	0.0067	0.0063
Venus	15787-12-22 12:14 G	7487498.81	7487499.01	7487499.23	0.0068	0.0017
Venus	15788-08-03 17:16 G	7487724.04	7487724.22	7487724.43	0.0068	0.0031
Mercury	15794-09-08 15:50 G	7489951.13	7489951.16	7489951.22	0.0071	0.0067
Mercury	15794-12-05 16:48 G	7490039.12	7490039.20	7490039.28	0.0071	0.0057
Mercury	15795-03-03 17:16 G	7490127.13	7490127.22	7490127.32	0.0071	0.0048
Mercury	15795-05-30 18:00 G	7490215.14	7490215.25	7490215.37	0.0071	0.0039
Mercury	15795-08-26 18:28 G	7490303.16	7490303.27	7490303.40	0.0071	0.0030
Mercury	15795-11-22 19:26 G	7490391.18	7490391.31	7490391.44	0.0071	0.0020
Mercury	15796-02-18 20:09 G	7490479.21	7490479.34	7490479.47	0.0071	0.0011

Mercury	15796-05-16 20:52 G	7490567.24	7490567.37	7490567.50	0.0071	0.0001
Mercury	15796-08-12 21:36 G	7490655.27	7490655.40	7490655.53	0.0072	0.0008
Mercury	15796-11-08 22:19 G	7490743.30	7490743.43	7490743.56	0.0072	0.0018
Mercury	15797-02-04 22:48 G	7490831.33	7490831.45	7490831.58	0.0072	0.0028
Mercury	15797-05-03 23:45 G	7490919.37	7490919.49	7490919.60	0.0072	0.0037
Mercury	15797-07-31 00:14 G	7491007.42	7491007.51	7491007.62	0.0072	0.0047
Mercury	15797-10-27 00:57 G	7491095.47	7491095.54	7491095.63	0.0072	0.0057
Mercury	15798-01-23 01:40 G	7491183.53	7491183.57	7491183.63	0.0072	0.0067
Moon	15868-01-16 15:07 G	7516742.93	7516743.13	7516743.37	0.0080	0.0041
Earth	15868-01-16 16:04 G	7516742.96	7516743.17	7516743.40	0.0080	0.0041 *
Mars	15869-05-17 10:19 G	7517229.86	7517229.93	7517230.09	0.0079	0.0075
Venus	15873-10-18 03:07 G	7518844.46	7518844.63	7518844.80	0.0077	0.0048
Venus	15874-05-31 12:00 G	7519069.79	7519070.00	7519070.22	0.0077	0.0020
Mercury	15880-04-29 13:40 G	7521229.98	7521230.07	7521230.18	0.0074	0.0062
Mercury	15880-07-26 16:04 G	7521318.03	7521318.17	7521318.33	0.0073	0.0047
Mercury	15880-10-22 18:28 G	7521406.10	7521406.27	7521406.45	0.0073	0.0032
Mercury	15881-01-18 21:07 G	7521494.19	7521494.38	7521494.56	0.0073	0.0017
Mercury	15881-04-16 23:16 G	7521582.28	7521582.47	7521582.67	0.0073	0.0002
Mercury	15881-07-14 01:26 G	7521670.38	7521670.56	7521670.76	0.0073	0.0013
Mercury	15881-10-10 03:36 G	7521758.49	7521758.65	7521758.85	0.0073	0.0028
Mercury	15882-01-06 06:00 G	7521846.61	7521846.75	7521846.92	0.0073	0.0042
Mercury	15882-04-04 08:24 G	7521934.74	7521934.85	7521934.98	0.0073	0.0056
Mercury	15882-07-01 10:19 G	7522022.91	7522022.93	7522023.00	0.0072	0.0071

# 17TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 17th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Earth	16024-07-19 21:36	G	7573906.18	7573906.40	7573906.64	0.0064	0.0027	
Moon	16024-07-20 01:12	G	7573906.32	7573906.55	7573906.79	0.0064	0.0026	*
Moon	16025-07-21 06:14	G	7574272.66	7574272.76	7574272.89	0.0064	0.0057	
Earth	16025-07-21 09:07	G	7574272.80	7574272.88	7574273.01	0.0064	0.0059	*
Venus	16033-06-10 19:26	G	7577154.14	7577154.31	7577154.50	0.0068	0.0040	
Venus	16034-01-22 00:43	G	7577379.32	7577379.53	7577379.76	0.0068	0.0007	
Venus	16034-09-04 05:45	G	7577604.63	7577604.74	7577604.89	0.0068	0.0054	
Mercury	16040-05-10 07:12	G	7579679.80	7579679.80	7579679.81	0.0071	0.0071	
Mercury	16040-08-06 07:40	G	7579767.77	7579767.82	7579767.90	0.0071	0.0062	
Mercury	16040-11-02 08:38	G	7579855.77	7579855.86	7579855.95	0.0071	0.0052	
Mercury	16041-01-29 09:07	G	7579943.78	7579943.88	7579943.99	0.0071	0.0043	
Mercury	16041-04-27 09:50	G	7580031.80	7580031.91	7580032.03	0.0071	0.0034	
Mercury	16041-07-24 10:33	G	7580119.82	7580119.94	7580120.07	0.0071	0.0025	
Mercury	16041-10-20 11:16	G	7580207.84	7580207.97	7580208.10	0.0071	0.0015	
Mercury	16042-01-16 12:00	G	7580295.87	7580296.00	7580296.13	0.0071	0.0006	
Mercury	16042-04-14 12:43	G	7580383.90	7580384.03	7580384.16	0.0072	0.0004	
Mercury	16042-07-11 13:12	G	7580471.93	7580472.05	7580472.19	0.0072	0.0014	
Mercury	16042-10-07 14:09	G	7580559.96	7580560.09	7580560.21	0.0072	0.0023	
Mercury	16043-01-03 14:38	G	7580648.00	7580648.11	7580648.23	0.0072	0.0033	
Mercury	16043-04-01 15:07	G	7580736.04	7580736.13	7580736.25	0.0072	0.0043	
Mercury	16043-06-28 15:50	G	7580824.08	7580824.16	7580824.26	0.0072	0.0053	
Mercury	16043-09-24 16:48	G	7580912.14	7580912.20	7580912.27	0.0072	0.0063	
Earth	16114-01-20 01:40	G	7606596.49	7606596.57	7606596.69	0.0080	0.0073	
Moon	16114-01-20 05:02	G	7606596.63	7606596.71	7606596.85	0.0080	0.0072	*
Venus	16119-11-18 17:31	G	7608725.01	7608725.23	7608725.44	0.0077	0.0015	
Venus	16120-07-01 01:40	G	7608950.44	7608950.57	7608950.76	0.0077	0.0054	

Mercury	16125-12-30 01:40 G	7610958.53	7610958.57	7610958.65	0.0074	0.0070
Mercury	16126-03-28 04:04 G	7611046.56	7611046.67	7611046.82	0.0073	0.0055
Mercury	16126-06-24 06:43 G	7611134.63	7611134.78	7611134.95	0.0073	0.0039
Mercury	16126-09-20 09:07 G	7611222.71	7611222.88	7611223.07	0.0073	0.0025
Mercury	16126-12-17 11:45 G	7611310.80	7611310.99	7611311.18	0.0073	0.0009
Mercury	16127-03-15 14:09 G	7611398.89	7611399.09	7611399.28	0.0073	0.0005
Mercury	16127-06-11 16:19 G	7611487.00	7611487.18	7611487.37	0.0073	0.0020
Mercury	16127-09-07 18:28 G	7611575.11	7611575.27	7611575.45	0.0073	0.0035
Mercury	16127-12-04 20:52 G	7611663.24	7611663.37	7611663.52	0.0073	0.0049
Mercury	16128-03-01 22:48 G	7611751.38	7611751.45	7611751.57	0.0072	0.0064
Moon	16270-07-24 01:12 G	7663759.30	7663759.55	7663759.82	0.0064	0.0016
Earth	16270-07-24 02:09 G	7663759.36	7663759.59	7663759.86	0.0064	0.0017 *
Venus	16279-07-12 06:43 G	7667034.58	7667034.78	7667034.99	0.0068	0.0022
Venus	16280-02-22 11:45 G	7667259.79	7667259.99	7667260.20	0.0068	0.0025
Mercury	16286-04-07 22:33 G	7669496.42	7669496.44	7669496.47	0.0071	0.0069
Mercury	16286-07-04 23:02 G	7669584.40	7669584.46	7669584.54	0.0071	0.0060
Mercury	16286-09-30 23:45 G	7669672.41	7669672.49	7669672.59	0.0071	0.0051
Mercury	16286-12-28 00:43 G	7669760.42	7669760.53	7669760.64	0.0071	0.0041
Mercury	16287-03-26 01:12 G	7669848.44	7669848.55	7669848.67	0.0071	0.0032
Mercury	16287-06-22 01:55 G	7669936.46	7669936.58	7669936.71	0.0071	0.0023
Mercury	16287-09-18 02:38 G	7670024.48	7670024.61	7670024.74	0.0071	0.0013
Mercury	16287-12-15 03:21 G	7670112.51	7670112.64	7670112.77	0.0071	0.0004
Mercury	16288-03-12 04:04 G	7670200.54	7670200.67	7670200.80	0.0071	0.0006
Mercury	16288-06-08 04:33 G	7670288.57	7670288.69	7670288.83	0.0072	0.0016
Mercury	16288-09-04 05:31 G	7670376.60	7670376.73	7670376.85	0.0072	0.0025
Mercury	16288-12-01 06:00 G	7670464.64	7670464.75	7670464.87	0.0072	0.0035
Mercury	16289-02-27 06:43 G	7670552.68	7670552.78	7670552.89	0.0072	0.0045
Mercury	16289-05-26 07:12 G	7670640.73	7670640.80	7670640.90	0.0072	0.0055
Mercury	16289-08-22 08:24 G	7670728.79	7670728.85	7670728.90	0.0072	0.0065
Moon	16359-01-22 01:12 G	7696082.55	7696082.55	7696082.57	0.0081	0.0080

Venus	16365-05-07 19:55 G	7698380.21	7698380.33	7698380.46	0.0077	0.0064
Venus	16365-12-19 05:02 G	7698605.49	7698605.71	7698605.94	0.0077	0.0006
Venus	16366-08-01 13:26 G	7698831.03	7698831.06	7698831.14	0.0076	0.0075
Mercury	16371-11-27 15:21 G	7700775.08	7700775.14	7700775.21	0.0074	0.0069
Mercury	16372-02-23 17:31 G	7700863.11	7700863.23	7700863.37	0.0073	0.0054
Mercury	16372-05-21 20:09 G	7700951.18	7700951.34	7700951.51	0.0073	0.0039
Mercury	16372-08-17 22:33 G	7701039.26	7701039.44	7701039.63	0.0073	0.0024
Mercury	16372-11-14 00:57 G	7701127.35	7701127.54	7701127.74	0.0073	0.0009
Mercury	16373-02-10 03:21 G	7701215.45	7701215.64	7701215.83	0.0073	0.0006
Mercury	16373-05-09 05:31 G	7701303.55	7701303.73	7701303.92	0.0073	0.0021
Mercury	16373-08-05 07:40 G	7701391.67	7701391.82	7701392.01	0.0073	0.0036
Mercury	16373-11-01 10:19 G	7701479.79	7701479.93	7701480.07	0.0073	0.0050
Mercury	16374-01-28 12:14 G	7701567.94	7701568.01	7701568.12	0.0072	0.0065
Moon	16516-07-27 04:19 G	7753612.43	7753612.68	7753612.93	0.0064	0.0007
Earth	16516-07-27 07:12 G	7753612.55	7753612.80	7753613.06	0.0064	0.0007 *
Mars	16519-02-07 19:26 G	7754538.01	7754538.31	7754538.62	0.0065	0.0006
Venus	16524-12-29 12:43 G	7756689.90	7756690.03	7756690.20	0.0067	0.0050
Venus	16525-08-11 18:14 G	7756915.04	7756915.26	7756915.48	0.0068	0.0003
Venus	16526-03-24 23:16 G	7757140.31	7757140.47	7757140.65	0.0068	0.0044
Mercury	16532-03-05 13:55 G	7759313.05	7759313.08	7759313.14	0.0071	0.0067
Mercury	16532-06-01 14:52 G	7759401.04	7759401.12	7759401.20	0.0071	0.0057
Mercury	16532-08-28 15:21 G	7759489.05	7759489.14	7759489.24	0.0071	0.0048
Mercury	16532-11-24 16:04 G	7759577.06	7759577.17	7759577.29	0.0071	0.0039
Mercury	16533-02-20 16:48 G	7759665.08	7759665.20	7759665.32	0.0071	0.0029
Mercury	16533-05-19 17:31 G	7759753.10	7759753.23	7759753.36	0.0071	0.0020
Mercury	16533-08-15 18:14 G	7759841.13	7759841.26	7759841.39	0.0071	0.0011
Mercury	16533-11-11 18:57 G	7759929.15	7759929.29	7759929.42	0.0071	0.0002
Mercury	16534-02-07 19:40 G	7760017.18	7760017.32	7760017.45	0.0072	0.0009
Mercury	16534-05-06 20:09 G	7760105.22	7760105.34	7760105.47	0.0072	0.0018
Mercury	16534-08-02 20:52 G	7760193.25	7760193.37	7760193.50	0.0072	0.0028

Mercury	16534-10-29 21:36 G	7760281.29	7760281.40	7760281.52	0.0072	0.0038
Mercury	16535-01-25 22:04 G	7760369.33	7760369.42	7760369.53	0.0072	0.0048
Mercury	16535-04-23 23:02 G	7760457.39	7760457.46	7760457.54	0.0072	0.0058
Mercury	16535-07-20 23:45 G	7760545.45	7760545.49	7760545.54	0.0072	0.0068
Earth	16605-01-25 09:21 G	7785935.73	7785935.89	7785936.08	0.0080	0.0060
Moon	16605-01-25 12:43 G	7785935.87	7785936.03	7785936.24	0.0080	0.0056 *
Venus	16611-06-08 08:38 G	7788260.69	7788260.86	7788261.08	0.0077	0.0036
Venus	16612-01-19 17:45 G	7788486.06	7788486.24	7788486.46	0.0077	0.0034
Mercury	16617-10-25 05:02 G	7790591.64	7790591.71	7790591.82	0.0074	0.0065
Mercury	16618-01-21 07:26 G	7790679.69	7790679.81	7790679.97	0.0073	0.0050
Mercury	16618-04-19 09:50 G	7790767.76	7790767.91	7790768.10	0.0073	0.0035
Mercury	16618-07-16 12:28 G	7790855.84	7790856.02	7790856.22	0.0073	0.0019
Mercury	16618-10-12 15:07 G	7790943.93	7790944.13	7790944.32	0.0073	0.0004
Mercury	16619-01-08 17:16 G	7791032.03	7791032.22	7791032.42	0.0073	0.0011
Mercury	16619-04-06 19:26 G	7791120.14	7791120.31	7791120.50	0.0073	0.0026
Mercury	16619-07-03 21:50 G	7791208.26	7791208.41	7791208.58	0.0073	0.0040
Mercury	16619-09-30 00:00 G	7791296.39	7791296.50	7791296.64	0.0073	0.0055
Mercury	16619-12-27 02:24 G	7791384.55	7791384.60	7791384.67	0.0072	0.0069
Earth	16762-07-31 10:19 G	7843465.67	7843465.93	7843466.19	0.0064	0.0002
Moon	16762-07-31 12:43 G	7843465.78	7843466.03	7843466.28	0.0064	0.0004 *
Venus	16771-01-29 22:19 G	7846570.27	7846570.43	7846570.64	0.0067	0.0038
Venus	16771-09-12 03:50 G	7846795.45	7846795.66	7846795.89	0.0068	0.0010
Venus	16772-04-24 08:52 G	7847020.77	7847020.87	7847021.01	0.0068	0.0057
Mercury	16778-02-01 05:02 G	7849129.68	7849129.71	7849129.76	0.0071	0.0067
Mercury	16778-04-30 05:45 G	7849217.67	7849217.74	7849217.82	0.0071	0.0058
Mercury	16778-07-27 06:14 G	7849305.68	7849305.76	7849305.87	0.0071	0.0049
Mercury	16778-10-23 07:12 G	7849393.69	7849393.80	7849393.91	0.0071	0.0039
Mercury	16779-01-19 07:40 G	7849481.71	7849481.82	7849481.95	0.0071	0.0030
Mercury	16779-04-17 08:24 G	7849569.73	7849569.85	7849569.98	0.0071	0.0021
Mercury	16779-07-14 09:07 G	7849657.75	7849657.88	7849658.01	0.0071	0.0011

Mercury	16779-10-10 09:50 G	7849745.78	7849745.91	7849746.04	0.0071	0.0002
Mercury	16780-01-06 10:33 G	7849833.81	7849833.94	7849834.07	0.0071	0.0008
Mercury	16780-04-03 11:02 G	7849921.84	7849921.96	7849922.10	0.0072	0.0018
Mercury	16780-06-30 12:00 G	7850009.87	7850010.00	7850010.12	0.0072	0.0027
Mercury	16780-09-26 12:28 G	7850097.91	7850098.02	7850098.14	0.0072	0.0037
Mercury	16780-12-23 12:57 G	7850185.95	7850186.04	7850186.16	0.0072	0.0047
Mercury	16781-03-21 13:40 G	7850274.00	7850274.07	7850274.17	0.0072	0.0057
Mercury	16781-06-17 14:24 G	7850362.07	7850362.10	7850362.16	0.0072	0.0067
Moon	16851-01-28 10:04 G	7875788.74	7875788.92	7875789.15	0.0080	0.0053
Earth	16851-01-28 11:31 G	7875788.83	7875788.98	7875789.19	0.0080	0.0057 *
Mars	16853-01-28 17:02 G	7876519.96	7876520.21	7876520.53	0.0079	0.0041
Venus	16857-07-07 18:43 G	7878141.08	7878141.28	7878141.50	0.0077	0.0021
Venus	16858-02-18 03:21 G	7878366.49	7878366.64	7878366.83	0.0077	0.0049
Mercury	16863-09-21 17:45 G	7880408.18	7880408.24	7880408.33	0.0074	0.0068
Mercury	16863-12-18 20:09 G	7880496.22	7880496.34	7880496.49	0.0073	0.0053
Mercury	16864-03-15 22:33 G	7880584.29	7880584.44	7880584.62	0.0073	0.0038
Mercury	16864-06-12 00:57 G	7880672.37	7880672.54	7880672.74	0.0073	0.0023
Mercury	16864-09-08 03:36 G	7880760.46	7880760.65	7880760.85	0.0073	0.0007
Mercury	16864-12-05 06:00 G	7880848.56	7880848.75	7880848.95	0.0073	0.0008
Mercury	16865-03-03 08:09 G	7880936.67	7880936.84	7880937.03	0.0073	0.0023
Mercury	16865-05-30 10:19 G	7881024.78	7881024.93	7881025.11	0.0073	0.0038
Mercury	16865-08-26 12:43 G	7881112.91	7881113.03	7881113.18	0.0073	0.0052
Mercury	16865-11-22 14:52 G	7881201.06	7881201.12	7881201.22	0.0072	0.0067

# 18TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 18th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Earth	17008-08-03 11:31	G	7933318.73	7933318.98	7933319.24	0.0064	0.0003	
Moon	17008-08-03 13:26	G	7933318.80	7933319.06	7933319.33	0.0064	0.0006	*
Venus	17017-03-01 07:12	G	7936450.62	7936450.80	7936451.02	0.0067	0.0028	
Venus	17017-10-12 12:28	G	7936675.82	7936676.02	7936676.24	0.0068	0.0020	
Venus	17018-05-25 18:00	G	7936901.23	7936901.25	7936901.28	0.0068	0.0067	
Mercury	17023-12-30 19:55	G	7938946.31	7938946.33	7938946.36	0.0071	0.0069	
Mercury	17024-03-27 20:38	G	7939034.30	7939034.36	7939034.43	0.0071	0.0060	
Mercury	17024-06-23 21:07	G	7939122.30	7939122.38	7939122.48	0.0071	0.0051	
Mercury	17024-09-19 21:50	G	7939210.31	7939210.41	7939210.52	0.0071	0.0042	
Mercury	17024-12-16 22:33	G	7939298.33	7939298.44	7939298.56	0.0071	0.0032	
Mercury	17025-03-14 23:16	G	7939386.35	7939386.47	7939386.60	0.0071	0.0023	
Mercury	17025-06-11 00:00	G	7939474.37	7939474.50	7939474.63	0.0071	0.0013	
Mercury	17025-09-07 00:43	G	7939562.40	7939562.53	7939562.66	0.0071	0.0004	
Mercury	17025-12-04 01:26	G	7939650.42	7939650.56	7939650.69	0.0071	0.0006	
Mercury	17026-03-02 01:55	G	7939738.46	7939738.58	7939738.72	0.0072	0.0016	
Mercury	17026-05-29 02:38	G	7939826.49	7939826.61	7939826.74	0.0072	0.0025	
Mercury	17026-08-25 03:21	G	7939914.53	7939914.64	7939914.76	0.0072	0.0035	
Mercury	17026-11-21 03:50	G	7940002.57	7940002.66	7940002.78	0.0072	0.0045	
Mercury	17027-02-17 04:33	G	7940090.62	7940090.69	7940090.79	0.0072	0.0055	
Mercury	17027-05-16 05:16	G	7940178.68	7940178.72	7940178.79	0.0072	0.0065	
Moon	17097-01-31 11:16	G	7965641.79	7965641.97	7965642.19	0.0080	0.0049	
Earth	17097-01-31 14:09	G	7965641.91	7965642.09	7965642.30	0.0080	0.0052	*
Venus	17102-12-26 19:26	G	7967796.29	7967796.31	7967796.40	0.0077	0.0076	
Venus	17103-08-09 05:16	G	7968021.50	7968021.72	7968021.94	0.0077	0.0005	
Venus	17104-03-21 13:40	G	7968246.97	7968247.07	7968247.21	0.0076	0.0065	
Mercury	17109-08-20 06:14	G	7970224.73	7970224.76	7970224.83	0.0074	0.0071	



Mercury	17109-11-16 08:38 G	7970312.75	7970312.86	7970313.01	0.0073	0.0056
Mercury	17110-02-12 11:31 G	7970400.82	7970400.98	7970401.15	0.0073	0.0040
Mercury	17110-05-11 13:55 G	7970488.90	7970489.08	7970489.27	0.0073	0.0025
Mercury	17110-08-07 16:19 G	7970576.99	7970577.18	7970577.38	0.0073	0.0009
Mercury	17110-11-03 18:43 G	7970665.09	7970665.28	7970665.48	0.0073	0.0006
Mercury	17111-01-30 20:52 G	7970753.19	7970753.37	7970753.57	0.0073	0.0021
Mercury	17111-04-28 23:31 G	7970841.31	7970841.48	7970841.65	0.0073	0.0035
Mercury	17111-07-26 01:26 G	7970929.44	7970929.56	7970929.72	0.0073	0.0050
Mercury	17111-10-22 03:36 G	7971017.59	7971017.65	7971017.76	0.0073	0.0065
Moon	17254-08-06 06:28 G	8023171.52	8023171.77	8023172.03	0.0064	0.0013
Earth	17254-08-06 10:04 G	8023171.67	8023171.92	8023172.18	0.0064	0.0009 *
Mars	17256-05-28 15:50 G	8023833.13	8023833.16	8023833.29	0.0065	0.0063
Venus	17263-03-31 14:38 G	8026330.92	8026331.11	8026331.33	0.0067	0.0024
Venus	17263-11-11 19:40 G	8026556.13	8026556.32	8026556.55	0.0068	0.0024
Mercury	17270-02-22 10:48 G	8028850.91	8028850.95	8028851.01	0.0071	0.0066
Mercury	17270-05-21 11:16 G	8028938.91	8028938.97	8028939.07	0.0071	0.0057
Mercury	17270-08-17 12:14 G	8029026.92	8029027.01	8029027.11	0.0071	0.0047
Mercury	17270-11-13 12:43 G	8029114.93	8029115.03	8029115.15	0.0071	0.0038
Mercury	17271-02-09 13:26 G	8029202.95	8029203.06	8029203.19	0.0071	0.0029
Mercury	17271-05-08 14:09 G	8029290.97	8029291.09	8029291.22	0.0071	0.0019
Mercury	17271-08-04 14:52 G	8029378.99	8029379.12	8029379.26	0.0071	0.0010
Mercury	17271-10-31 15:36 G	8029467.02	8029467.15	8029467.29	0.0071	0.0001
Mercury	17272-01-27 16:19 G	8029555.05	8029555.18	8029555.31	0.0071	0.0010
Mercury	17272-04-24 16:48 G	8029643.08	8029643.20	8029643.34	0.0072	0.0020
Mercury	17272-07-21 17:45 G	8029731.12	8029731.24	8029731.36	0.0072	0.0029
Mercury	17272-10-17 18:14 G	8029819.16	8029819.26	8029819.38	0.0072	0.0039
Mercury	17273-01-13 18:43 G	8029907.20	8029907.28	8029907.39	0.0072	0.0049
Mercury	17273-04-11 19:26 G	8029995.25	8029995.31	8029995.40	0.0072	0.0059
Mercury	17273-07-08 20:09 G	8030083.32	8030083.34	8030083.39	0.0072	0.0069
Earth	17343-02-04 10:04 G	8055494.82	8055494.92	8055495.07	0.0080	0.0071

Moon	17343-02-04 13:12 G	8055494.94	8055495.05	8055495.21	0.0080	0.0069 *
Venus	17349-01-25 02:24 G	8057676.56	8057676.60	8057676.68	0.0077	0.0075
Venus	17349-09-07 12:00 G	8057901.78	8057902.00	8057902.22	0.0077	0.0004
Venus	17350-04-20 20:09 G	8058127.26	8058127.34	8058127.48	0.0077	0.0066
Mercury	17355-10-13 19:26 G	8060129.25	8060129.31	8060129.41	0.0074	0.0067
Mercury	17356-01-09 22:19 G	8060217.29	8060217.43	8060217.57	0.0073	0.0051
Mercury	17356-04-07 00:28 G	8060305.36	8060305.52	8060305.70	0.0073	0.0036
Mercury	17356-07-04 02:52 G	8060393.44	8060393.62	8060393.82	0.0073	0.0021
Mercury	17356-09-30 05:31 G	8060481.54	8060481.73	8060481.92	0.0073	0.0005
Mercury	17356-12-27 07:40 G	8060569.64	8060569.82	8060570.02	0.0073	0.0010
Mercury	17357-03-25 09:50 G	8060657.74	8060657.91	8060658.11	0.0073	0.0025
Mercury	17357-06-21 12:14 G	8060745.86	8060746.01	8060746.19	0.0073	0.0040
Mercury	17357-09-17 14:38 G	8060833.99	8060834.11	8060834.25	0.0073	0.0054
Mercury	17357-12-14 16:48 G	8060922.16	8060922.20	8060922.28	0.0072	0.0069
Earth	17500-08-10 07:12 G	8113024.57	8113024.80	8113025.06	0.0064	0.0021
Moon	17500-08-10 07:12 G	8113024.58	8113024.80	8113025.04	0.0064	0.0024 *
Earth	17501-08-11 19:12 G	8113391.27	8113391.30	8113391.33	0.0064	0.0064
Mars	17502-10-22 17:45 G	8113827.96	8113828.24	8113828.56	0.0065	0.0010
Venus	17509-05-01 20:52 G	8116211.18	8116211.37	8116211.59	0.0067	0.0025
Venus	17509-12-13 02:09 G	8116436.40	8116436.59	8116436.81	0.0068	0.0023
Mercury	17516-04-19 01:26 G	8118755.51	8118755.56	8118755.62	0.0071	0.0064
Mercury	17516-07-16 01:55 G	8118843.51	8118843.58	8118843.68	0.0071	0.0055
Mercury	17516-10-12 02:38 G	8118931.52	8118931.61	8118931.72	0.0071	0.0046
Mercury	17517-01-08 03:36 G	8119019.53	8119019.65	8119019.76	0.0071	0.0036
Mercury	17517-04-06 04:04 G	8119107.55	8119107.67	8119107.80	0.0071	0.0027
Mercury	17517-07-03 04:48 G	8119195.57	8119195.70	8119195.83	0.0071	0.0017
Mercury	17517-09-29 05:31 G	8119283.60	8119283.73	8119283.86	0.0071	0.0008
Mercury	17517-12-26 06:14 G	8119371.63	8119371.76	8119371.89	0.0071	0.0002
Mercury	17518-03-24 06:57 G	8119459.66	8119459.79	8119459.92	0.0071	0.0011
Mercury	17518-06-20 07:40 G	8119547.69	8119547.82	8119547.94	0.0072	0.0021

Mercury	17518-09-16 08:09 G	8119635.73	8119635.84	8119635.97	0.0072	0.0031
Mercury	17518-12-13 08:52 G	8119723.77	8119723.87	8119723.98	0.0072	0.0041
Mercury	17519-03-11 09:21 G	8119811.81	8119811.89	8119812.00	0.0072	0.0051
Mercury	17519-06-07 10:19 G	8119899.86	8119899.93	8119900.00	0.0072	0.0061
Mercury	17519-09-03 11:02 G	8119987.94	8119987.96	8119987.99	0.0072	0.0071
Earth	17590-02-09 11:16 G	8145714.93	8145714.97	8145715.05	0.0080	0.0077
Moon	17590-02-09 11:45 G	8145714.96	8145714.99	8145715.07	0.0080	0.0078 *
Venus	17595-02-25 08:24 G	8147556.82	8147556.85	8147556.92	0.0077	0.0075
Venus	17595-10-08 18:00 G	8147782.03	8147782.25	8147782.47	0.0077	0.0004
Venus	17596-05-21 02:52 G	8148007.51	8148007.62	8148007.74	0.0077	0.0065
Mercury	17601-12-07 08:52 G	8150033.78	8150033.87	8150033.98	0.0074	0.0063
Mercury	17602-03-05 11:02 G	8150121.83	8150121.96	8150122.13	0.0073	0.0048
Mercury	17602-06-01 13:26 G	8150209.90	8150210.06	8150210.25	0.0073	0.0033
Mercury	17602-08-28 16:04 G	8150297.99	8150298.17	8150298.37	0.0073	0.0017
Mercury	17602-11-24 18:43 G	8150386.08	8150386.28	8150386.47	0.0073	0.0002
Mercury	17603-02-20 21:07 G	8150474.19	8150474.38	8150474.57	0.0073	0.0013
Mercury	17603-05-19 23:16 G	8150562.30	8150562.47	8150562.66	0.0073	0.0028
Mercury	17603-08-16 01:40 G	8150650.42	8150650.57	8150650.73	0.0073	0.0043
Mercury	17603-11-12 03:36 G	8150738.55	8150738.65	8150738.79	0.0073	0.0058
Mercury	17604-02-08 06:00 G	8150826.75	8150826.75	8150826.78	0.0072	0.0072
Earth	17746-08-13 02:09 G	8202877.42	8202877.59	8202877.83	0.0064	0.0039
Moon	17746-08-13 06:00 G	8202877.57	8202877.75	8202877.97	0.0064	0.0041 *
Moon	17747-08-14 12:00 G	8203243.85	8203244.00	8203244.19	0.0064	0.0048
Earth	17747-08-14 13:40 G	8203243.93	8203244.07	8203244.29	0.0064	0.0047 *
Mars	17749-03-15 15:36 G	8203822.93	8203823.15	8203823.44	0.0065	0.0035
Venus	17755-06-01 01:26 G	8206091.38	8206091.56	8206091.77	0.0067	0.0030
Venus	17756-01-12 06:57 G	8206316.58	8206316.79	8206317.01	0.0068	0.0017
Venus	17756-08-24 11:31 G	8206541.95	8206541.98	8206542.07	0.0068	0.0065
Mercury	17762-06-12 15:50 G	8208660.11	8208660.16	8208660.21	0.0070	0.0065
Mercury	17762-09-08 16:19 G	8208748.11	8208748.18	8208748.27	0.0071	0.0056

Mercury	17762-12-05 16:48 G	8208836.12	8208836.20	8208836.31	0.0071	0.0047
Mercury	17763-03-03 17:45 G	8208924.13	8208924.24	8208924.35	0.0071	0.0037
Mercury	17763-05-30 18:14 G	8209012.15	8209012.26	8209012.39	0.0071	0.0028
Mercury	17763-08-26 18:57 G	8209100.17	8209100.29	8209100.42	0.0071	0.0019
Mercury	17763-11-22 19:40 G	8209188.19	8209188.32	8209188.45	0.0071	0.0009
Mercury	17764-02-18 20:24 G	8209276.22	8209276.35	8209276.48	0.0071	0.0001
Mercury	17764-05-16 21:07 G	8209364.25	8209364.38	8209364.51	0.0071	0.0010
Mercury	17764-08-12 21:36 G	8209452.28	8209452.40	8209452.53	0.0072	0.0020
Mercury	17764-11-08 22:19 G	8209540.31	8209540.43	8209540.56	0.0072	0.0030
Mercury	17765-02-04 22:48 G	8209628.35	8209628.45	8209628.57	0.0072	0.0040
Mercury	17765-05-03 23:45 G	8209716.40	8209716.49	8209716.59	0.0072	0.0049
Mercury	17765-07-31 00:14 G	8209804.45	8209804.51	8209804.60	0.0072	0.0059
Mercury	17765-10-27 00:57 G	8209892.52	8209892.54	8209892.58	0.0072	0.0069
Earth	17836-02-13 01:55 G	8235567.36	8235567.58	8235567.82	0.0080	0.0037
Moon	17836-02-13 04:48 G	8235567.49	8235567.70	8235567.95	0.0080	0.0039 *
Venus	17841-11-07 20:52 G	8237662.17	8237662.37	8237662.60	0.0077	0.0019
Venus	17842-06-21 05:45 G	8237887.59	8237887.74	8237887.92	0.0077	0.0052
Mercury	17848-01-31 20:09 G	8239938.28	8239938.34	8239938.44	0.0074	0.0068
Mercury	17848-04-28 22:48 G	8240026.32	8240026.45	8240026.60	0.0073	0.0052
Mercury	17848-07-26 01:12 G	8240114.39	8240114.55	8240114.73	0.0073	0.0037
Mercury	17848-10-22 03:36 G	8240202.48	8240202.65	8240202.85	0.0073	0.0022
Mercury	17849-01-18 06:14 G	8240290.57	8240290.76	8240290.96	0.0073	0.0006
Mercury	17849-04-16 08:38 G	8240378.67	8240378.86	8240379.06	0.0073	0.0009
Mercury	17849-07-13 11:02 G	8240466.78	8240466.96	8240467.15	0.0073	0.0024
Mercury	17849-10-09 13:26 G	8240554.90	8240555.06	8240555.22	0.0073	0.0039
Mercury	17850-01-05 15:36 G	8240643.03	8240643.15	8240643.29	0.0073	0.0054
Mercury	17850-04-03 17:45 G	8240731.19	8240731.24	8240731.31	0.0073	0.0069
Moon	17992-08-15 17:02 G	8292730.20	8292730.21	8292730.29	0.0064	0.0063
Earth	17992-08-15 19:26 G	8292730.27	8292730.31	8292730.38	0.0064	0.0062 *
Earth	17993-08-17 06:57 G	8293096.57	8293096.79	8293097.05	0.0064	0.0022

Moon 17993-08-17 11:02 G 8293096.72 8293096.96 8293097.20 0.0064 0.0022 \*

# 19TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 19th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	18001-07-01 05:02	G	8295971.54	8295971.71	8295971.89	0.0067	0.0041	
Venus	18002-02-11 10:04	G	8296196.71	8296196.92	8296197.15	0.0068	0.0007	
Venus	18002-09-24 15:07	G	8296422.01	8296422.13	8296422.28	0.0068	0.0054	
Mercury	18008-08-06 05:31	G	8298564.71	8298564.73	8298564.77	0.0070	0.0069	
Mercury	18008-11-02 06:00	G	8298652.70	8298652.75	8298652.84	0.0071	0.0060	
Mercury	18009-01-29 06:57	G	8298740.70	8298740.79	8298740.89	0.0071	0.0050	
Mercury	18009-04-27 07:26	G	8298828.71	8298828.81	8298828.93	0.0071	0.0041	
Mercury	18009-07-24 08:09	G	8298916.73	8298916.84	8298916.97	0.0071	0.0032	
Mercury	18009-10-20 08:52	G	8299004.75	8299004.87	8299005.00	0.0071	0.0022	
Mercury	18010-01-16 09:36	G	8299092.77	8299092.90	8299093.03	0.0071	0.0013	
Mercury	18010-04-14 10:19	G	8299180.80	8299180.93	8299181.06	0.0071	0.0003	
Mercury	18010-07-11 11:02	G	8299268.83	8299268.96	8299269.09	0.0071	0.0007	
Mercury	18010-10-07 11:31	G	8299356.86	8299356.98	8299357.12	0.0071	0.0017	
Mercury	18011-01-03 12:14	G	8299444.89	8299445.01	8299445.14	0.0072	0.0026	
Mercury	18011-04-01 12:57	G	8299532.93	8299533.04	8299533.16	0.0072	0.0036	
Mercury	18011-06-28 13:26	G	8299620.97	8299621.06	8299621.17	0.0072	0.0046	
Mercury	18011-09-24 14:09	G	8299709.02	8299709.09	8299709.18	0.0072	0.0056	

Mercury	18011-12-21 14:38 G	8299797.08	8299797.11	8299797.18	0.0072	0.0066
Moon	18082-02-14 12:43 G	8325419.76	8325420.03	8325420.29	0.0080	0.0004
Earth	18082-02-14 15:36 G	8325419.89	8325420.15	8325420.41	0.0080	0.0008 *
Mars	18083-03-03 09:50 G	8325801.63	8325801.91	8325802.23	0.0080	0.0034
Venus	18087-12-07 23:45 G	8327542.30	8327542.49	8327542.70	0.0077	0.0034
Venus	18088-07-20 08:52 G	8327767.68	8327767.87	8327768.07	0.0077	0.0036
Mercury	18094-03-26 07:26 G	8329842.80	8329842.81	8329842.85	0.0074	0.0073
Mercury	18094-06-22 09:50 G	8329930.81	8329930.91	8329931.05	0.0074	0.0058
Mercury	18094-09-18 12:28 G	8330018.87	8330019.02	8330019.19	0.0073	0.0042
Mercury	18094-12-15 14:52 G	8330106.95	8330107.12	8330107.31	0.0073	0.0027
Mercury	18095-03-13 17:31 G	8330195.04	8330195.23	8330195.42	0.0073	0.0011
Mercury	18095-06-09 19:55 G	8330283.14	8330283.33	8330283.53	0.0073	0.0004
Mercury	18095-09-05 22:19 G	8330371.24	8330371.43	8330371.62	0.0073	0.0019
Mercury	18095-12-03 00:43 G	8330459.36	8330459.53	8330459.70	0.0073	0.0034
Mercury	18096-02-29 02:52 G	8330547.49	8330547.62	8330547.77	0.0073	0.0049
Mercury	18096-05-27 05:02 G	8330635.64	8330635.71	8330635.82	0.0073	0.0064
Moon	18239-08-20 22:48 G	8382949.19	8382949.45	8382949.72	0.0064	0.0009
Earth	18239-08-20 22:48 G	8382949.20	8382949.45	8382949.72	0.0064	0.0007 *
Venus	18247-08-01 07:12 G	8385851.69	8385851.80	8385851.94	0.0067	0.0055
Venus	18248-03-13 12:28 G	8386076.81	8386077.02	8386077.24	0.0067	0.0009
Venus	18248-10-24 17:16 G	8386302.06	8386302.22	8386302.42	0.0068	0.0039
Mercury	18254-12-27 19:40 G	8388557.28	8388557.32	8388557.38	0.0070	0.0065
Mercury	18255-03-25 20:38 G	8388645.28	8388645.36	8388645.44	0.0071	0.0056
Mercury	18255-06-21 21:07 G	8388733.29	8388733.38	8388733.48	0.0071	0.0047
Mercury	18255-09-17 21:36 G	8388821.30	8388821.40	8388821.52	0.0071	0.0038
Mercury	18255-12-14 22:19 G	8388909.32	8388909.43	8388909.56	0.0071	0.0028
Mercury	18256-03-11 23:02 G	8388997.34	8388997.46	8388997.59	0.0071	0.0019
Mercury	18256-06-07 23:45 G	8389085.36	8389085.49	8389085.62	0.0071	0.0009
Mercury	18256-09-04 00:28 G	8389173.39	8389173.52	8389173.65	0.0071	0.0001
Mercury	18256-12-01 00:57 G	8389261.41	8389261.54	8389261.68	0.0071	0.0010

Mercury	18257-02-27 01:40 G	8389349.45	8389349.57	8389349.70	0.0071	0.0020
Mercury	18257-05-26 02:09 G	8389437.48	8389437.59	8389437.72	0.0072	0.0030
Mercury	18257-08-22 02:52 G	8389525.52	8389525.62	8389525.74	0.0072	0.0040
Mercury	18257-11-18 03:50 G	8389613.56	8389613.66	8389613.75	0.0072	0.0049
Mercury	18258-02-14 04:19 G	8389701.61	8389701.68	8389701.76	0.0072	0.0059
Mercury	18258-05-13 05:02 G	8389789.68	8389789.71	8389789.75	0.0072	0.0069
Moon	18328-02-18 22:19 G	8415272.29	8415272.43	8415272.58	0.0080	0.0066
Earth	18328-02-18 23:16 G	8415272.35	8415272.47	8415272.61	0.0080	0.0070 *
Mars	18329-07-26 15:36 G	8415795.82	8415796.15	8415796.48	0.0080	0.0003
Venus	18334-01-07 23:16 G	8417422.37	8417422.47	8417422.62	0.0077	0.0063
Venus	18334-08-21 08:52 G	8417647.65	8417647.87	8417648.09	0.0077	0.0008
Mercury	18340-08-16 19:55 G	8419835.28	8419835.33	8419835.39	0.0074	0.0070
Mercury	18340-11-12 22:04 G	8419923.31	8419923.42	8419923.57	0.0074	0.0055
Mercury	18341-02-09 00:57 G	8420011.37	8420011.54	8420011.70	0.0073	0.0039
Mercury	18341-05-08 03:07 G	8420099.46	8420099.63	8420099.83	0.0073	0.0024
Mercury	18341-08-04 05:45 G	8420187.55	8420187.74	8420187.94	0.0073	0.0008
Mercury	18341-10-31 08:09 G	8420275.65	8420275.84	8420276.04	0.0073	0.0007
Mercury	18342-01-27 10:33 G	8420363.76	8420363.94	8420364.13	0.0073	0.0022
Mercury	18342-04-25 12:57 G	8420451.87	8420452.04	8420452.21	0.0073	0.0037
Mercury	18342-07-22 15:21 G	8420540.01	8420540.14	8420540.27	0.0073	0.0052
Mercury	18342-10-18 17:31 G	8420628.16	8420628.23	8420628.31	0.0073	0.0067
Moon	18485-08-22 07:26 G	8472801.66	8472801.81	8472802.00	0.0064	0.0047
Earth	18485-08-22 10:48 G	8472801.79	8472801.95	8472802.16	0.0064	0.0044 *
Earth	18486-08-23 22:33 G	8473168.26	8473168.44	8473168.66	0.0064	0.0041
Moon	18486-08-24 00:28 G	8473168.35	8473168.52	8473168.74	0.0064	0.0044 *
Venus	18494-04-12 12:28 G	8475956.84	8475957.02	8475957.23	0.0067	0.0032
Venus	18494-11-23 18:00 G	8476182.03	8476182.25	8476182.46	0.0068	0.0016
Venus	18495-07-06 22:33 G	8476407.40	8476407.44	8476407.54	0.0068	0.0064
Mercury	18501-05-19 09:21 G	8478549.85	8478549.89	8478549.94	0.0070	0.0066
Mercury	18501-08-15 09:50 G	8478637.84	8478637.91	8478638.00	0.0071	0.0057

Mercury	18501-11-11 10:19 G	8478725.85	8478725.93	8478726.04	0.0071	0.0048
Mercury	18502-02-07 11:16 G	8478813.86	8478813.97	8478814.09	0.0071	0.0038
Mercury	18502-05-06 11:45 G	8478901.88	8478901.99	8478902.12	0.0071	0.0029
Mercury	18502-08-02 12:43 G	8478989.90	8478990.03	8478990.16	0.0071	0.0019
Mercury	18502-10-29 13:12 G	8479077.92	8479078.05	8479078.19	0.0071	0.0010
Mercury	18503-01-25 13:55 G	8479165.95	8479166.08	8479166.22	0.0071	0.0002
Mercury	18503-04-23 14:38 G	8479253.98	8479254.11	8479254.24	0.0071	0.0010
Mercury	18503-07-20 15:21 G	8479342.01	8479342.14	8479342.27	0.0071	0.0019
Mercury	18503-10-16 16:04 G	8479430.05	8479430.17	8479430.29	0.0072	0.0029
Mercury	18504-01-12 16:33 G	8479518.09	8479518.19	8479518.31	0.0072	0.0039
Mercury	18504-04-09 17:16 G	8479606.13	8479606.22	8479606.32	0.0072	0.0049
Mercury	18504-07-06 18:00 G	8479694.18	8479694.25	8479694.33	0.0072	0.0059
Mercury	18504-10-02 18:28 G	8479782.25	8479782.27	8479782.32	0.0072	0.0069
Moon	18575-02-22 08:09 G	8505491.60	8505491.84	8505492.08	0.0080	0.0025
Earth	18575-02-22 10:48 G	8505491.72	8505491.95	8505492.21	0.0080	0.0028 *
Mars	18575-12-17 17:31 G	8505789.91	8505790.23	8505790.56	0.0080	0.0014
Venus	18580-09-19 07:12 G	8507527.60	8507527.80	8507528.02	0.0077	0.0025
Venus	18581-05-02 16:04 G	8507753.01	8507753.17	8507753.37	0.0077	0.0046
Mercury	18587-01-06 07:12 G	8509827.76	8509827.80	8509827.89	0.0074	0.0070
Mercury	18587-04-04 09:50 G	8509915.79	8509915.91	8509916.06	0.0074	0.0054
Mercury	18587-07-01 12:14 G	8510003.86	8510004.01	8510004.19	0.0073	0.0039
Mercury	18587-09-27 15:07 G	8510091.94	8510092.13	8510092.32	0.0073	0.0023
Mercury	18587-12-24 17:31 G	8510180.04	8510180.23	8510180.42	0.0073	0.0007
Mercury	18588-03-21 19:55 G	8510268.14	8510268.33	8510268.52	0.0073	0.0008
Mercury	18588-06-17 22:04 G	8510356.25	8510356.42	8510356.62	0.0073	0.0023
Mercury	18588-09-14 00:28 G	8510444.36	8510444.52	8510444.70	0.0073	0.0038
Mercury	18588-12-11 02:52 G	8510532.50	8510532.62	8510532.76	0.0073	0.0053
Mercury	18589-03-09 05:02 G	8510620.66	8510620.71	8510620.79	0.0073	0.0068
Moon	18732-08-27 05:45 G	8563020.48	8563020.74	8563021.00	0.0064	0.0000
Earth	18732-08-27 09:21 G	8563020.63	8563020.89	8563021.15	0.0064	0.0003 *



Venus	18740-05-13 11:16 G	8565836.88	8565836.97	8565837.09	0.0067	0.0059
Venus	18740-12-24 16:33 G	8566061.98	8566062.19	8566062.41	0.0067	0.0013
Venus	18741-08-06 21:50 G	8566287.22	8566287.41	8566287.60	0.0068	0.0035
Mercury	18747-10-09 22:33 G	8568542.42	8568542.44	8568542.47	0.0070	0.0069
Mercury	18748-01-05 23:02 G	8568630.40	8568630.46	8568630.54	0.0070	0.0060
Mercury	18748-04-02 23:45 G	8568718.41	8568718.49	8568718.59	0.0071	0.0051
Mercury	18748-06-30 00:14 G	8568806.42	8568806.51	8568806.63	0.0071	0.0042
Mercury	18748-09-26 01:12 G	8568894.43	8568894.55	8568894.67	0.0071	0.0032
Mercury	18748-12-23 01:40 G	8568982.45	8568982.57	8568982.70	0.0071	0.0023
Mercury	18749-03-21 02:24 G	8569070.47	8569070.60	8569070.73	0.0071	0.0013
Mercury	18749-06-17 03:07 G	8569158.50	8569158.63	8569158.76	0.0071	0.0004
Mercury	18749-09-13 03:50 G	8569246.53	8569246.66	8569246.79	0.0071	0.0006
Mercury	18749-12-10 04:19 G	8569334.56	8569334.68	8569334.81	0.0071	0.0016
Mercury	18750-03-08 05:02 G	8569422.59	8569422.71	8569422.84	0.0071	0.0026
Mercury	18750-06-04 05:31 G	8569510.63	8569510.73	8569510.85	0.0072	0.0036
Mercury	18750-08-31 06:28 G	8569598.67	8569598.77	8569598.87	0.0072	0.0045
Mercury	18750-11-27 06:57 G	8569686.71	8569686.79	8569686.88	0.0072	0.0055
Mercury	18751-02-23 07:40 G	8569774.77	8569774.82	8569774.88	0.0072	0.0065
Earth	18821-02-24 11:16 G	8595343.82	8595343.97	8595344.14	0.0080	0.0063
Moon	18821-02-24 14:24 G	8595343.96	8595344.10	8595344.27	0.0080	0.0063 *
Mars	18822-05-10 06:57 G	8595783.47	8595783.79	8595784.13	0.0080	0.0007
Venus	18826-10-20 01:55 G	8597407.54	8597407.58	8597407.67	0.0077	0.0074
Venus	18827-06-02 11:31 G	8597632.76	8597632.98	8597633.21	0.0077	0.0002
Venus	18828-01-13 20:09 G	8597858.27	8597858.34	8597858.46	0.0077	0.0069
Mercury	18833-08-24 19:55 G	8599908.24	8599908.33	8599908.45	0.0074	0.0062
Mercury	18833-11-20 22:19 G	8599996.29	8599996.43	8599996.60	0.0073	0.0046
Mercury	18834-02-17 00:57 G	8600084.37	8600084.54	8600084.72	0.0073	0.0031
Mercury	18834-05-16 03:21 G	8600172.46	8600172.64	8600172.84	0.0073	0.0015
Mercury	18834-08-12 06:00 G	8600260.55	8600260.75	8600260.94	0.0073	0.0001
Mercury	18834-11-08 08:09 G	8600348.66	8600348.84	8600349.04	0.0073	0.0016

Mercury	18835-02-04 10:19 G	8600436.77	8600436.93	8600437.12	0.0073	0.0031
Mercury	18835-05-03 12:43 G	8600524.90	8600525.03	8600525.20	0.0073	0.0046
Mercury	18835-07-30 14:52 G	8600613.04	8600613.12	8600613.25	0.0073	0.0061
Earth	18978-08-29 14:09 G	8652873.04	8652873.09	8652873.22	0.0064	0.0060
Moon	18978-08-29 15:07 G	8652873.06	8652873.13	8652873.27	0.0064	0.0058 *
Moon	18979-08-30 23:45 G	8653239.26	8653239.49	8653239.75	0.0064	0.0024
Earth	18979-08-31 02:24 G	8653239.38	8653239.60	8653239.86	0.0064	0.0025 *
Venus	18987-01-23 11:45 G	8655941.88	8655941.99	8655942.15	0.0067	0.0052
Venus	18987-09-05 17:16 G	8656167.00	8656167.22	8656167.44	0.0067	0.0005
Venus	18988-04-17 21:50 G	8656392.26	8656392.41	8656392.60	0.0068	0.0043
Mercury	18994-05-27 11:31 G	8658622.96	8658622.98	8658623.01	0.0070	0.0069
Mercury	18994-08-23 12:00 G	8658710.94	8658711.00	8658711.08	0.0070	0.0060
Mercury	18994-11-19 12:28 G	8658798.94	8658799.02	8658799.13	0.0071	0.0051
Mercury	18995-02-15 13:26 G	8658886.95	8658887.06	8658887.17	0.0071	0.0041
Mercury	18995-05-14 13:55 G	8658974.97	8658975.08	8658975.21	0.0071	0.0032
Mercury	18995-08-10 14:38 G	8659062.99	8659063.11	8659063.24	0.0071	0.0022
Mercury	18995-11-06 15:21 G	8659151.01	8659151.14	8659151.27	0.0071	0.0013
Mercury	18996-02-02 16:04 G	8659239.04	8659239.17	8659239.30	0.0071	0.0003
Mercury	18996-04-30 16:48 G	8659327.06	8659327.20	8659327.33	0.0071	0.0007
Mercury	18996-07-27 17:16 G	8659415.09	8659415.22	8659415.35	0.0071	0.0016
Mercury	18996-10-23 18:00 G	8659503.13	8659503.25	8659503.37	0.0071	0.0026
Mercury	18997-01-19 18:28 G	8659591.16	8659591.27	8659591.39	0.0072	0.0036
Mercury	18997-04-17 19:12 G	8659679.21	8659679.30	8659679.41	0.0072	0.0046
Mercury	18997-07-14 19:40 G	8659767.25	8659767.32	8659767.42	0.0072	0.0056
Mercury	18997-10-10 20:38 G	8659855.31	8659855.36	8659855.42	0.0072	0.0065

# 20TH MILLENNIUM CE

**This is a list of transits visible from Pluto in the 20th millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Earth	19068-02-29 11:45	G	8685562.73	8685562.99	8685563.25	0.0080	0.0004	
Moon	19068-02-29 13:12	G	8685562.80	8685563.05	8685563.30	0.0080	0.0006	*
Mars	19068-09-30 11:02	G	8685776.76	8685776.96	8685777.22	0.0080	0.0058	
Venus	19073-07-02 03:50	G	8687512.54	8687512.66	8687512.81	0.0077	0.0061	
Venus	19074-02-12 12:57	G	8687737.83	8687738.04	8687738.27	0.0077	0.0011	
Mercury	19080-04-12 06:57	G	8689988.70	8689988.79	8689988.92	0.0074	0.0061	
Mercury	19080-07-09 09:50	G	8690076.76	8690076.91	8690077.06	0.0073	0.0045	
Mercury	19080-10-05 12:00	G	8690164.83	8690165.00	8690165.19	0.0073	0.0030	
Mercury	19081-01-01 14:24	G	8690252.92	8690253.10	8690253.31	0.0073	0.0015	
Mercury	19081-03-30 17:16	G	8690341.02	8690341.22	8690341.41	0.0073	0.0002	
Mercury	19081-06-26 19:26	G	8690429.13	8690429.31	8690429.51	0.0073	0.0017	
Mercury	19081-09-22 21:50	G	8690517.24	8690517.41	8690517.59	0.0073	0.0032	
Mercury	19081-12-20 00:28	G	8690605.37	8690605.52	8690605.66	0.0073	0.0047	
Mercury	19082-03-18 02:09	G	8690693.52	8690693.59	8690693.71	0.0073	0.0063	
Moon	19225-09-02 03:50	G	8743091.49	8743091.66	8743091.88	0.0064	0.0039	
Earth	19225-09-02 04:48	G	8743091.52	8743091.70	8743091.92	0.0064	0.0040	*
Moon	19226-09-03 15:50	G	8743457.98	8743458.16	8743458.38	0.0064	0.0043	
Earth	19226-09-03 16:19	G	8743458.03	8743458.18	8743458.40	0.0064	0.0045	*
Mars	19227-07-31 11:16	G	8743788.80	8743788.97	8743789.19	0.0065	0.0049	
Venus	19233-10-05 10:33	G	8746046.82	8746046.94	8746047.10	0.0067	0.0052	
Venus	19234-05-18 15:50	G	8746271.95	8746272.16	8746272.39	0.0067	0.0006	
Venus	19234-12-29 20:38	G	8746497.21	8746497.36	8746497.55	0.0068	0.0043	

Mercury	19241-04-11 00:28 G	8748791.47	8748791.52	8748791.58	0.0070	0.0063
Mercury	19241-07-08 00:57 G	8748879.47	8748879.54	8748879.63	0.0070	0.0055
Mercury	19241-10-04 01:55 G	8748967.48	8748967.58	8748967.68	0.0071	0.0045
Mercury	19241-12-31 02:24 G	8749055.49	8749055.60	8749055.72	0.0071	0.0036
Mercury	19242-03-29 02:52 G	8749143.51	8749143.62	8749143.75	0.0071	0.0027
Mercury	19242-06-25 03:36 G	8749231.53	8749231.65	8749231.78	0.0071	0.0017
Mercury	19242-09-21 04:19 G	8749319.55	8749319.68	8749319.81	0.0071	0.0007
Mercury	19242-12-18 05:02 G	8749407.58	8749407.71	8749407.84	0.0071	0.0002
Mercury	19243-03-16 05:31 G	8749495.61	8749495.73	8749495.87	0.0071	0.0012
Mercury	19243-06-12 06:14 G	8749583.64	8749583.76	8749583.89	0.0071	0.0022
Mercury	19243-09-08 06:57 G	8749671.67	8749671.79	8749671.91	0.0071	0.0031
Mercury	19243-12-05 07:26 G	8749759.71	8749759.81	8749759.93	0.0072	0.0042
Mercury	19244-03-02 08:24 G	8749847.76	8749847.85	8749847.94	0.0072	0.0051
Mercury	19244-05-29 08:52 G	8749935.81	8749935.87	8749935.94	0.0072	0.0061
Mercury	19244-08-25 09:36 G	8750023.89	8750023.90	8750023.92	0.0072	0.0071
Moon	19315-03-05 04:04 G	8775781.44	8775781.67	8775781.90	0.0080	0.0032
Earth	19315-03-05 04:33 G	8775781.46	8775781.69	8775781.95	0.0080	0.0029 *
Venus	19320-03-14 01:40 G	8777617.47	8777617.57	8777617.68	0.0077	0.0068
Venus	19320-10-25 10:48 G	8777842.73	8777842.95	8777843.17	0.0077	0.0004
Venus	19321-06-07 19:12 G	8778068.28	8778068.30	8778068.37	0.0077	0.0075
Mercury	19326-11-29 16:04 G	8780069.12	8780069.17	8780069.23	0.0074	0.0070
Mercury	19327-02-25 18:14 G	8780157.15	8780157.26	8780157.41	0.0074	0.0055
Mercury	19327-05-24 20:52 G	8780245.21	8780245.37	8780245.55	0.0073	0.0039
Mercury	19327-08-20 23:16 G	8780333.30	8780333.47	8780333.67	0.0073	0.0023
Mercury	19327-11-17 01:55 G	8780421.39	8780421.58	8780421.78	0.0073	0.0007
Mercury	19328-02-13 04:19 G	8780509.49	8780509.68	8780509.88	0.0073	0.0008
Mercury	19328-05-11 06:28 G	8780597.60	8780597.77	8780597.97	0.0073	0.0024
Mercury	19328-08-07 08:52 G	8780685.72	8780685.87	8780686.05	0.0073	0.0039
Mercury	19328-11-03 11:16 G	8780773.86	8780773.97	8780774.12	0.0073	0.0054
Mercury	19329-01-30 13:26 G	8780862.02	8780862.06	8780862.15	0.0073	0.0069

Moon	19472-09-05 11:31 G	8833309.81	8833309.98	8833310.21	0.0064	0.0038
Earth	19472-09-05 14:09 G	8833309.89	8833310.09	8833310.32	0.0064	0.0035 *
Earth	19473-09-07 01:40 G	8833676.43	8833676.57	8833676.77	0.0064	0.0049
Moon	19473-09-07 03:21 G	8833676.50	8833676.64	8833676.81	0.0064	0.0052 *
Mars	19473-12-21 21:36 G	8833782.10	8833782.40	8833782.70	0.0064	0.0009
Venus	19480-06-17 06:00 G	8836151.73	8836151.75	8836151.84	0.0067	0.0065
Venus	19481-01-28 11:16 G	8836376.77	8836376.97	8836377.20	0.0067	0.0019
Venus	19481-09-10 16:19 G	8836602.00	8836602.18	8836602.39	0.0067	0.0030
Mercury	19488-02-24 12:28 G	8838959.97	8838960.02	8838960.07	0.0070	0.0065
Mercury	19488-05-22 12:57 G	8839047.97	8839048.04	8839048.13	0.0070	0.0056
Mercury	19488-08-18 13:26 G	8839135.98	8839136.06	8839136.17	0.0071	0.0047
Mercury	19488-11-14 14:24 G	8839223.99	8839224.10	8839224.22	0.0071	0.0037
Mercury	19489-02-10 14:52 G	8839312.01	8839312.12	8839312.25	0.0071	0.0028
Mercury	19489-05-09 15:36 G	8839400.03	8839400.15	8839400.28	0.0071	0.0018
Mercury	19489-08-05 16:19 G	8839488.05	8839488.18	8839488.31	0.0071	0.0009
Mercury	19489-11-01 17:02 G	8839576.08	8839576.21	8839576.34	0.0071	0.0001
Mercury	19490-01-28 17:31 G	8839664.11	8839664.23	8839664.37	0.0071	0.0011
Mercury	19490-04-26 18:14 G	8839752.14	8839752.26	8839752.39	0.0071	0.0021
Mercury	19490-07-23 18:43 G	8839840.17	8839840.28	8839840.41	0.0071	0.0031
Mercury	19490-10-19 19:26 G	8839928.21	8839928.31	8839928.43	0.0072	0.0040
Mercury	19491-01-15 20:24 G	8840016.25	8840016.35	8840016.44	0.0072	0.0050
Mercury	19491-04-13 20:52 G	8840104.31	8840104.37	8840104.45	0.0072	0.0060
Mercury	19491-07-10 21:36 G	8840192.38	8840192.40	8840192.43	0.0072	0.0070
Moon	19562-03-08 12:28 G	8865999.82	8866000.02	8866000.27	0.0080	0.0036
Earth	19562-03-08 15:07 G	8865999.92	8866000.13	8866000.38	0.0080	0.0039 *
Venus	19567-07-08 04:48 G	8867947.49	8867947.70	8867947.92	0.0077	0.0017
Venus	19568-02-18 13:40 G	8868172.92	8868173.07	8868173.23	0.0077	0.0054
Mercury	19573-10-14 01:26 G	8870237.54	8870237.56	8870237.62	0.0074	0.0072
Mercury	19574-01-10 04:04 G	8870325.56	8870325.67	8870325.81	0.0074	0.0056
Mercury	19574-04-08 06:28 G	8870413.62	8870413.77	8870413.95	0.0073	0.0040

Mercury	19574-07-05 09:07 G	8870501.70	8870501.88	8870502.07	0.0073	0.0025
Mercury	19574-10-01 11:31 G	8870589.79	8870589.98	8870590.18	0.0073	0.0009
Mercury	19574-12-28 14:09 G	8870677.90	8870678.09	8870678.29	0.0073	0.0007
Mercury	19575-03-26 16:19 G	8870766.01	8870766.18	8870766.38	0.0073	0.0022
Mercury	19575-06-22 18:57 G	8870854.12	8870854.29	8870854.46	0.0073	0.0037
Mercury	19575-09-18 20:52 G	8870942.26	8870942.37	8870942.53	0.0073	0.0053
Mercury	19575-12-15 23:16 G	8871030.42	8871030.47	8871030.56	0.0073	0.0068
Moon	19719-09-09 18:14 G	8923528.06	8923528.26	8923528.50	0.0064	0.0033
Earth	19719-09-09 21:36 G	8923528.21	8923528.40	8923528.63	0.0064	0.0036 *
Earth	19720-09-10 09:50 G	8923894.74	8923894.91	8923895.08	0.0064	0.0048
Moon	19720-09-10 11:45 G	8923894.83	8923894.99	8923895.21	0.0064	0.0045 *
Venus	19727-10-11 05:16 G	8926481.55	8926481.72	8926481.92	0.0067	0.0036
Venus	19728-05-23 10:19 G	8926706.72	8926706.93	8926707.16	0.0067	0.0011
Venus	19729-01-03 15:07 G	8926932.04	8926932.13	8926932.26	0.0068	0.0059
Mercury	19735-01-09 00:00 G	8929128.48	8929128.50	8929128.53	0.0070	0.0068
Mercury	19735-04-07 00:28 G	8929216.46	8929216.52	8929216.60	0.0070	0.0060
Mercury	19735-07-04 00:57 G	8929304.47	8929304.54	8929304.65	0.0070	0.0051
Mercury	19735-09-30 01:55 G	8929392.48	8929392.58	8929392.69	0.0071	0.0041
Mercury	19735-12-27 02:24 G	8929480.49	8929480.60	8929480.73	0.0071	0.0032
Mercury	19736-03-24 03:07 G	8929568.51	8929568.63	8929568.76	0.0071	0.0022
Mercury	19736-06-20 03:50 G	8929656.53	8929656.66	8929656.79	0.0071	0.0013
Mercury	19736-09-16 04:33 G	8929744.56	8929744.69	8929744.82	0.0071	0.0003
Mercury	19736-12-13 05:02 G	8929832.58	8929832.71	8929832.85	0.0071	0.0007
Mercury	19737-03-11 05:45 G	8929920.61	8929920.74	8929920.87	0.0071	0.0016
Mercury	19737-06-07 06:14 G	8930008.65	8930008.76	8930008.89	0.0071	0.0027
Mercury	19737-09-03 07:12 G	8930096.69	8930096.80	8930096.91	0.0071	0.0036
Mercury	19737-11-30 07:40 G	8930184.73	8930184.82	8930184.93	0.0072	0.0046
Mercury	19738-02-26 08:24 G	8930272.77	8930272.85	8930272.94	0.0072	0.0056
Mercury	19738-05-25 08:52 G	8930360.83	8930360.87	8930360.93	0.0072	0.0066
Moon	19809-03-11 17:02 G	8956217.98	8956218.21	8956218.47	0.0080	0.0027

Earth	19809-03-11 20:24 G	8956218.12	8956218.35	8956218.61	0.0080	0.0028 *
Venus	19814-03-19 18:57 G	8958052.15	8958052.29	8958052.47	0.0077	0.0054
Venus	19814-10-31 04:19 G	8958277.47	8958277.68	8958277.90	0.0077	0.0018
Mercury	19820-11-24 11:45 G	8960493.93	8960493.99	8960494.10	0.0074	0.0067
Mercury	19821-02-20 14:24 G	8960581.98	8960582.10	8960582.26	0.0074	0.0051
Mercury	19821-05-19 17:16 G	8960670.05	8960670.22	8960670.39	0.0073	0.0035
Mercury	19821-08-15 19:26 G	8960758.13	8960758.31	8960758.51	0.0073	0.0020
Mercury	19821-11-11 22:04 G	8960846.23	8960846.42	8960846.62	0.0073	0.0004
Mercury	19822-02-08 00:28 G	8960934.33	8960934.52	8960934.72	0.0073	0.0012
Mercury	19822-05-07 03:07 G	8961022.45	8961022.63	8961022.81	0.0073	0.0027
Mercury	19822-08-03 05:02 G	8961110.57	8961110.71	8961110.88	0.0073	0.0043
Mercury	19822-10-30 07:26 G	8961198.71	8961198.81	8961198.94	0.0073	0.0058
Moon	19966-09-12 20:24 G	9013746.23	9013746.35	9013746.54	0.0064	0.0051
Earth	19966-09-13 00:14 G	9013746.37	9013746.51	9013746.69	0.0064	0.0050 *
Earth	19967-09-14 12:00 G	9014112.80	9014113.00	9014113.24	0.0064	0.0033
Moon	19967-09-14 15:36 G	9014112.93	9014113.15	9014113.38	0.0064	0.0033 *
Venus	19974-06-22 20:09 G	9016586.33	9016586.34	9016586.40	0.0067	0.0066
Venus	19975-02-03 01:26 G	9016811.36	9016811.56	9016811.78	0.0067	0.0019
Venus	19975-09-16 06:14 G	9017036.58	9017036.76	9017036.98	0.0067	0.0028
Mercury	19982-02-19 11:02 G	9019384.96	9019384.96	9019385.01	0.0070	0.0070
Mercury	19982-05-18 12:00 G	9019472.94	9019473.00	9019473.08	0.0070	0.0060
Mercury	19982-08-14 12:28 G	9019560.94	9019561.02	9019561.12	0.0070	0.0051
Mercury	19982-11-10 13:12 G	9019648.95	9019649.05	9019649.17	0.0071	0.0041
Mercury	19983-02-06 13:55 G	9019736.97	9019737.08	9019737.20	0.0071	0.0032
Mercury	19983-05-05 14:24 G	9019824.99	9019825.10	9019825.24	0.0071	0.0023
Mercury	19983-08-01 15:07 G	9019913.01	9019913.13	9019913.27	0.0071	0.0013
Mercury	19983-10-28 15:50 G	9020001.03	9020001.16	9020001.29	0.0071	0.0004
Mercury	19984-01-24 16:33 G	9020089.06	9020089.19	9020089.32	0.0071	0.0006
Mercury	19984-04-21 17:02 G	9020177.09	9020177.21	9020177.35	0.0071	0.0016
Mercury	19984-07-18 17:45 G	9020265.12	9020265.24	9020265.37	0.0071	0.0026

Mercury	19984-10-14 18:14 G	9020353.16	9020353.26	9020353.39	0.0071	0.0036
Mercury	19985-01-10 18:57 G	9020441.20	9020441.29	9020441.40	0.0072	0.0046
Mercury	19985-04-08 19:26 G	9020529.24	9020529.31	9020529.41	0.0072	0.0056
Mercury	19985-07-05 20:09 G	9020617.30	9020617.34	9020617.41	0.0072	0.0066

# 21ST MILLENNIUM CE

This is a list of transits visible from Pluto in the 21st millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Moon	20056-03-13 17:45 G		9046435.99	9046436.24	9046436.50	0.0080	0.0004	
Earth	20056-03-13 21:36 G		9046436.14	9046436.40	9046436.66	0.0080	0.0001	*
Venus	20061-07-11 16:04 G		9048381.98	9048382.17	9048382.39	0.0077	0.0030	
Venus	20062-02-22 01:12 G		9048607.38	9048607.55	9048607.75	0.0077	0.0042	
Mercury	20068-01-04 21:07 G		9050750.32	9050750.38	9050750.47	0.0074	0.0068	
Mercury	20068-04-01 23:31 G		9050838.36	9050838.48	9050838.64	0.0074	0.0052	
Mercury	20068-06-29 02:24 G		9050926.43	9050926.60	9050926.78	0.0073	0.0036	
Mercury	20068-09-25 04:33 G		9051014.52	9051014.69	9051014.89	0.0073	0.0021	
Mercury	20068-12-22 07:26 G		9051102.61	9051102.81	9051103.00	0.0073	0.0004	
Mercury	20069-03-20 09:50 G		9051190.71	9051190.91	9051191.10	0.0073	0.0011	
Mercury	20069-06-16 12:00 G		9051278.83	9051279.00	9051279.19	0.0073	0.0027	
Mercury	20069-09-12 14:24 G		9051366.95	9051367.10	9051367.27	0.0073	0.0042	
Mercury	20069-12-09 17:02 G		9051455.09	9051455.21	9051455.33	0.0073	0.0057	
Mercury	20070-03-07 18:57 G		9051543.29	9051543.29	9051543.32	0.0073	0.0072	



Earth	20214-09-17 13:26 G	9104330.81	9104331.06	9104331.32	0.0064	0.0013
Moon	20214-09-17 17:02 G	9104330.96	9104331.21	9104331.47	0.0064	0.0016 *
Mars	20215-01-16 20:52 G	9104452.08	9104452.37	9104452.67	0.0064	0.0001
Venus	20221-10-15 14:52 G	9106916.01	9106916.12	9106916.26	0.0067	0.0054
Venus	20222-05-28 20:09 G	9107141.12	9107141.34	9107141.56	0.0067	0.0007
Venus	20223-01-09 00:43 G	9107366.37	9107366.53	9107366.73	0.0067	0.0041
Mercury	20229-06-28 23:02 G	9109729.41	9109729.46	9109729.52	0.0070	0.0063
Mercury	20229-09-24 23:31 G	9109817.41	9109817.48	9109817.57	0.0070	0.0054
Mercury	20229-12-22 00:00 G	9109905.41	9109905.50	9109905.62	0.0070	0.0045
Mercury	20230-03-20 00:57 G	9109993.43	9109993.54	9109993.66	0.0071	0.0035
Mercury	20230-06-16 01:26 G	9110081.45	9110081.56	9110081.69	0.0071	0.0026
Mercury	20230-09-12 02:09 G	9110169.47	9110169.59	9110169.72	0.0071	0.0016
Mercury	20230-12-09 02:52 G	9110257.49	9110257.62	9110257.75	0.0071	0.0006
Mercury	20231-03-07 03:36 G	9110345.51	9110345.65	9110345.78	0.0071	0.0004
Mercury	20231-06-03 04:04 G	9110433.54	9110433.67	9110433.80	0.0071	0.0013
Mercury	20231-08-30 04:48 G	9110521.58	9110521.70	9110521.83	0.0071	0.0022
Mercury	20231-11-26 05:16 G	9110609.61	9110609.72	9110609.84	0.0071	0.0032
Mercury	20232-02-22 05:45 G	9110697.65	9110697.74	9110697.86	0.0071	0.0043
Mercury	20232-05-20 06:43 G	9110785.69	9110785.78	9110785.87	0.0072	0.0052
Mercury	20232-08-16 07:26 G	9110873.75	9110873.81	9110873.87	0.0072	0.0062
Moon	20303-03-18 12:57 G	9136653.85	9136654.04	9136654.27	0.0080	0.0048
Earth	20303-03-18 16:33 G	9136653.99	9136654.19	9136654.42	0.0080	0.0046 *
Venus	20308-11-04 10:19 G	9138711.72	9138711.93	9138712.15	0.0077	0.0019
Venus	20309-06-17 19:12 G	9138937.15	9138937.30	9138937.47	0.0077	0.0053
Mercury	20315-05-15 07:12 G	9141094.71	9141094.80	9141094.93	0.0074	0.0061
Mercury	20315-08-11 09:50 G	9141182.77	9141182.91	9141183.08	0.0073	0.0045
Mercury	20315-11-07 12:28 G	9141270.85	9141271.02	9141271.21	0.0073	0.0028
Mercury	20316-02-03 15:07 G	9141358.94	9141359.13	9141359.32	0.0073	0.0013
Mercury	20316-05-01 17:31 G	9141447.04	9141447.23	9141447.43	0.0073	0.0003
Mercury	20316-07-28 19:40 G	9141535.14	9141535.32	9141535.52	0.0073	0.0019

Mercury	20316-10-24 22:19 G	9141623.26	9141623.43	9141623.61	0.0073	0.0034
Mercury	20317-01-21 00:14 G	9141711.39	9141711.51	9141711.68	0.0073	0.0050
Mercury	20317-04-19 02:38 G	9141799.55	9141799.61	9141799.72	0.0073	0.0065
Earth	20461-09-19 08:52 G	9194548.64	9194548.87	9194549.13	0.0064	0.0021
Moon	20461-09-19 12:00 G	9194548.78	9194549.00	9194549.26	0.0064	0.0024 *
Earth	20462-09-20 20:38 G	9194915.33	9194915.36	9194915.45	0.0064	0.0063
Venus	20469-02-06 06:00 G	9197245.65	9197245.75	9197245.90	0.0067	0.0055
Venus	20469-09-19 11:16 G	9197470.76	9197470.97	9197471.20	0.0067	0.0008
Venus	20470-05-02 16:19 G	9197696.01	9197696.18	9197696.36	0.0067	0.0040
Mercury	20476-11-04 09:50 G	9200073.86	9200073.91	9200073.97	0.0070	0.0063
Mercury	20477-01-31 10:19 G	9200161.85	9200161.93	9200162.02	0.0070	0.0054
Mercury	20477-04-29 10:48 G	9200249.86	9200249.95	9200250.07	0.0070	0.0045
Mercury	20477-07-26 11:45 G	9200337.88	9200337.99	9200338.10	0.0071	0.0035
Mercury	20477-10-22 12:14 G	9200425.89	9200426.01	9200426.14	0.0071	0.0026
Mercury	20478-01-18 12:57 G	9200513.91	9200514.04	9200514.17	0.0071	0.0016
Mercury	20478-04-16 13:40 G	9200601.94	9200602.07	9200602.20	0.0071	0.0007
Mercury	20478-07-13 14:09 G	9200689.96	9200690.09	9200690.23	0.0071	0.0004
Mercury	20478-10-09 14:52 G	9200777.99	9200778.12	9200778.25	0.0071	0.0013
Mercury	20479-01-05 15:36 G	9200866.02	9200866.15	9200866.27	0.0071	0.0023
Mercury	20479-04-03 16:04 G	9200954.06	9200954.17	9200954.29	0.0071	0.0032
Mercury	20479-06-30 16:33 G	9201042.10	9201042.19	9201042.31	0.0071	0.0043
Mercury	20479-09-26 17:16 G	9201130.14	9201130.22	9201130.32	0.0072	0.0052
Mercury	20479-12-23 17:45 G	9201218.19	9201218.24	9201218.32	0.0072	0.0063
Mars	20550-11-17 02:09 G	9227113.40	9227113.59	9227113.85	0.0080	0.0059
Earth	20551-03-22 12:00 G	9227238.82	9227239.00	9227239.19	0.0080	0.0054
Moon	20551-03-22 15:21 G	9227238.96	9227239.14	9227239.33	0.0080	0.0055 *
Venus	20556-02-27 01:55 G	9229041.37	9229041.58	9229041.80	0.0077	0.0020
Venus	20556-10-09 10:33 G	9229266.79	9229266.94	9229267.12	0.0077	0.0052
Mercury	20562-09-20 16:04 G	9231439.07	9231439.17	9231439.29	0.0074	0.0060
Mercury	20562-12-17 18:43 G	9231527.13	9231527.28	9231527.44	0.0073	0.0044

Mercury	20563-03-15 20:52 G	9231615.21	9231615.37	9231615.57	0.0073	0.0029
Mercury	20563-06-11 23:45 G	9231703.30	9231703.49	9231703.69	0.0073	0.0012
Mercury	20563-09-08 02:09 G	9231791.40	9231791.59	9231791.79	0.0073	0.0004
Mercury	20563-12-05 04:33 G	9231879.51	9231879.69	9231879.89	0.0073	0.0019
Mercury	20564-03-02 06:43 G	9231967.62	9231967.78	9231967.97	0.0073	0.0035
Mercury	20564-05-29 09:21 G	9232055.76	9232055.89	9232056.04	0.0073	0.0050
Mercury	20564-08-25 11:45 G	9232143.91	9232143.99	9232144.08	0.0073	0.0065
Earth	20708-09-23 02:09 G	9284766.54	9284766.59	9284766.68	0.0064	0.0061
Moon	20708-09-23 05:02 G	9284766.65	9284766.71	9284766.78	0.0064	0.0061 *
Mars	20709-09-19 16:04 G	9285127.88	9285128.17	9285128.47	0.0064	0.0007
Moon	20709-09-24 10:33 G	9285132.71	9285132.94	9285133.20	0.0064	0.0022
Earth	20709-09-24 14:24 G	9285132.86	9285133.10	9285133.35	0.0064	0.0021 *
Venus	20716-06-01 20:09 G	9287575.27	9287575.34	9287575.44	0.0067	0.0061
Venus	20717-01-13 01:26 G	9287800.34	9287800.56	9287800.77	0.0067	0.0014
Venus	20717-08-26 06:00 G	9288025.57	9288025.75	9288025.96	0.0067	0.0033
Mercury	20724-03-14 19:55 G	9290418.30	9290418.33	9290418.38	0.0070	0.0066
Mercury	20724-06-10 20:24 G	9290506.29	9290506.35	9290506.44	0.0070	0.0057
Mercury	20724-09-06 21:21 G	9290594.30	9290594.39	9290594.49	0.0070	0.0047
Mercury	20724-12-03 21:50 G	9290682.31	9290682.41	9290682.53	0.0070	0.0038
Mercury	20725-03-01 22:33 G	9290770.32	9290770.44	9290770.56	0.0071	0.0029
Mercury	20725-05-28 23:02 G	9290858.34	9290858.46	9290858.59	0.0071	0.0020
Mercury	20725-08-24 23:45 G	9290946.36	9290946.49	9290946.62	0.0071	0.0010
Mercury	20725-11-21 00:28 G	9291034.39	9291034.52	9291034.65	0.0071	0.0000
Mercury	20726-02-17 00:57 G	9291122.42	9291122.54	9291122.68	0.0071	0.0010
Mercury	20726-05-16 01:40 G	9291210.45	9291210.57	9291210.70	0.0071	0.0019
Mercury	20726-08-12 02:09 G	9291298.48	9291298.59	9291298.72	0.0071	0.0029
Mercury	20726-11-08 02:52 G	9291386.52	9291386.62	9291386.74	0.0071	0.0039
Mercury	20727-02-04 03:36 G	9291474.56	9291474.65	9291474.75	0.0071	0.0049
Mercury	20727-05-03 04:04 G	9291562.61	9291562.67	9291562.76	0.0072	0.0059
Mercury	20727-07-30 04:48 G	9291650.68	9291650.70	9291650.74	0.0072	0.0069

Earth	20798-03-24 19:55 G	9317456.10	9317456.33	9317456.58	0.0080	0.0030
Moon	20798-03-24 22:48 G	9317456.24	9317456.45	9317456.70	0.0080	0.0035 *
Venus	20803-06-21 13:26 G	9319370.88	9319371.06	9319371.27	0.0077	0.0037
Venus	20804-02-01 22:48 G	9319596.26	9319596.45	9319596.65	0.0077	0.0035
Mercury	20810-01-27 22:48 G	9321783.40	9321783.45	9321783.53	0.0074	0.0069
Mercury	20810-04-26 01:26 G	9321871.43	9321871.56	9321871.70	0.0073	0.0053
Mercury	20810-07-23 04:04 G	9321959.50	9321959.67	9321959.84	0.0073	0.0037
Mercury	20810-10-19 06:14 G	9322047.59	9322047.76	9322047.96	0.0073	0.0022
Mercury	20811-01-15 09:07 G	9322135.68	9322135.88	9322136.08	0.0073	0.0005
Mercury	20811-04-13 11:16 G	9322223.79	9322223.97	9322224.18	0.0073	0.0011
Mercury	20811-07-10 13:55 G	9322311.90	9322312.08	9322312.27	0.0073	0.0026
Mercury	20811-10-06 16:04 G	9322400.02	9322400.17	9322400.34	0.0073	0.0042
Mercury	20812-01-02 18:43 G	9322488.16	9322488.28	9322488.40	0.0073	0.0057
Mercury	20812-03-30 20:52 G	9322576.37	9322576.37	9322576.40	0.0073	0.0072
Moon	20956-09-25 22:48 G	9375350.26	9375350.45	9375350.69	0.0064	0.0037
Earth	20956-09-26 02:09 G	9375350.40	9375350.59	9375350.84	0.0064	0.0034 *
Earth	20957-09-27 14:09 G	9375716.94	9375717.09	9375717.27	0.0064	0.0050
Moon	20957-09-27 17:45 G	9375717.10	9375717.24	9375717.40	0.0064	0.0053 *
Venus	20964-05-06 11:16 G	9378129.80	9378129.97	9378130.18	0.0067	0.0034
Venus	20964-12-17 16:48 G	9378354.98	9378355.20	9378355.41	0.0067	0.0014
Venus	20965-07-30 21:07 G	9378580.32	9378580.38	9378580.50	0.0067	0.0062
Mercury	20971-10-18 06:00 G	9380850.72	9380850.75	9380850.79	0.0070	0.0066
Mercury	20972-01-14 06:28 G	9380938.71	9380938.77	9380938.85	0.0070	0.0057
Mercury	20972-04-11 06:57 G	9381026.71	9381026.79	9381026.90	0.0070	0.0049
Mercury	20972-07-08 07:55 G	9381114.72	9381114.83	9381114.94	0.0070	0.0039
Mercury	20972-10-04 08:24 G	9381202.74	9381202.85	9381202.98	0.0071	0.0029
Mercury	20972-12-31 09:07 G	9381290.76	9381290.88	9381291.01	0.0071	0.0020
Mercury	20973-03-29 09:36 G	9381378.78	9381378.90	9381379.04	0.0071	0.0011
Mercury	20973-06-25 10:19 G	9381466.80	9381466.93	9381467.07	0.0071	0.0002
Mercury	20973-09-21 11:02 G	9381554.83	9381554.96	9381555.09	0.0071	0.0009

Mercury	20973-12-18 11:31 G	9381642.86	9381642.98	9381643.11	0.0071	0.0019
Mercury	20974-03-16 12:14 G	9381730.89	9381731.01	9381731.13	0.0071	0.0028
Mercury	20974-06-12 12:43 G	9381818.93	9381819.03	9381819.15	0.0071	0.0039
Mercury	20974-09-08 13:26 G	9381906.97	9381907.06	9381907.16	0.0071	0.0048
Mercury	20974-12-05 13:55 G	9381995.02	9381995.08	9381995.17	0.0072	0.0059
Mercury	20975-03-03 14:38 G	9382083.09	9382083.11	9382083.16	0.0072	0.0069

# 22ND MILLENNIUM CE

This is a list of transits visible from Pluto in the 22nd millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Moon	21046-03-29 00:00 G		9408040.27	9408040.50	9408040.76	0.0080	0.0027	
Earth	21046-03-29 03:07 G		9408040.41	9408040.63	9408040.89	0.0080	0.0029	*
Venus	21050-10-13 21:50 G		9409700.34	9409700.41	9409700.55	0.0077	0.0069	
Venus	21051-05-27 07:40 G		9409925.60	9409925.82	9409926.04	0.0077	0.0005	
Mercury	21057-09-02 06:43 G		9412215.72	9412215.78	9412215.86	0.0074	0.0069	
Mercury	21057-11-29 09:07 G		9412303.76	9412303.88	9412304.03	0.0074	0.0053	
Mercury	21058-02-25 11:45 G		9412391.83	9412391.99	9412392.17	0.0073	0.0037	
Mercury	21058-05-24 14:24 G		9412479.92	9412480.10	9412480.29	0.0073	0.0021	
Mercury	21058-08-20 16:48 G		9412568.01	9412568.20	9412568.41	0.0073	0.0006	
Mercury	21058-11-16 19:26 G		9412656.12	9412656.31	9412656.51	0.0073	0.0011	
Mercury	21059-02-12 21:36 G		9412744.23	9412744.40	9412744.60	0.0073	0.0027	
Mercury	21059-05-12 00:14 G		9412832.36	9412832.51	9412832.67	0.0073	0.0042	

Mercury	21059-08-08 02:09 G	9412920.50	9412920.59	9412920.73	0.0073	0.0058
Mars	21204-05-21 11:16 G	9465802.82	9465802.97	9465803.16	0.0064	0.0052
Earth	21204-09-30 00:14 G	9465934.26	9465934.51	9465934.76	0.0064	0.0012
Moon	21204-09-30 03:21 G	9465934.40	9465934.64	9465934.90	0.0064	0.0014 *
Venus	21211-08-29 20:38 G	9468459.27	9468459.36	9468459.47	0.0067	0.0059
Venus	21212-04-11 01:40 G	9468684.36	9468684.57	9468684.79	0.0067	0.0012
Venus	21212-11-22 06:14 G	9468909.59	9468909.76	9468909.96	0.0067	0.0035
Mercury	21219-08-19 15:50 G	9471371.11	9471371.16	9471371.23	0.0070	0.0061
Mercury	21219-11-15 16:19 G	9471459.11	9471459.18	9471459.28	0.0070	0.0052
Mercury	21220-02-11 17:16 G	9471547.12	9471547.22	9471547.33	0.0070	0.0042
Mercury	21220-05-09 17:45 G	9471635.13	9471635.24	9471635.36	0.0070	0.0033
Mercury	21220-08-05 18:28 G	9471723.15	9471723.27	9471723.40	0.0071	0.0024
Mercury	21220-11-01 18:57 G	9471811.17	9471811.29	9471811.43	0.0071	0.0015
Mercury	21221-01-28 19:55 G	9471899.19	9471899.33	9471899.46	0.0071	0.0005
Mercury	21221-04-26 20:24 G	9471987.22	9471987.35	9471987.48	0.0071	0.0005
Mercury	21221-07-23 20:52 G	9472075.25	9472075.37	9472075.51	0.0071	0.0015
Mercury	21221-10-19 21:36 G	9472163.28	9472163.40	9472163.53	0.0071	0.0025
Mercury	21222-01-15 22:19 G	9472251.32	9472251.43	9472251.55	0.0071	0.0034
Mercury	21222-04-13 22:48 G	9472339.36	9472339.45	9472339.56	0.0071	0.0044
Mercury	21222-07-10 23:16 G	9472427.40	9472427.47	9472427.57	0.0071	0.0055
Mercury	21222-10-07 00:00 G	9472515.46	9472515.50	9472515.57	0.0072	0.0065
Mars	21293-10-28 13:12 G	9498469.74	9498470.05	9498470.38	0.0080	0.0028
Earth	21294-04-01 04:19 G	9498624.55	9498624.68	9498624.85	0.0080	0.0065
Moon	21294-04-01 08:09 G	9498624.72	9498624.84	9498624.99	0.0080	0.0068 *
Venus	21298-09-17 12:43 G	9500254.85	9500255.03	9500255.23	0.0077	0.0041
Venus	21299-04-30 21:36 G	9500480.21	9500480.40	9500480.62	0.0077	0.0032
Mercury	21305-07-04 15:07 G	9502736.04	9502736.13	9502736.25	0.0074	0.0062
Mercury	21305-09-30 17:45 G	9502824.09	9502824.24	9502824.40	0.0073	0.0046
Mercury	21305-12-27 20:24 G	9502912.17	9502912.35	9502912.53	0.0073	0.0030
Mercury	21306-03-25 22:48 G	9503000.26	9503000.45	9503000.65	0.0073	0.0014

Mercury	21306-06-22 01:26 G	9503088.36	9503088.56	9503088.76	0.0073	0.0002
Mercury	21306-09-18 03:36 G	9503176.47	9503176.65	9503176.85	0.0073	0.0018
Mercury	21306-12-15 06:14 G	9503264.59	9503264.76	9503264.94	0.0073	0.0033
Mercury	21307-03-13 08:24 G	9503352.72	9503352.85	9503353.01	0.0073	0.0049
Mercury	21307-06-09 11:02 G	9503440.87	9503440.96	9503441.05	0.0073	0.0064
Mars	21452-08-31 22:04 G	9556485.16	9556485.42	9556485.72	0.0064	0.0020
Moon	21452-10-03 14:09 G	9556517.84	9556518.09	9556518.35	0.0064	0.0001
Earth	21452-10-03 18:00 G	9556517.99	9556518.25	9556518.51	0.0064	0.0003 *
Venus	21459-08-04 08:09 G	9559013.69	9559013.84	9559013.99	0.0067	0.0048
Venus	21460-03-16 12:57 G	9559238.82	9559239.04	9559239.26	0.0067	0.0001
Venus	21460-10-27 17:16 G	9559464.08	9559464.22	9559464.40	0.0067	0.0047
Mercury	21467-03-25 00:43 G	9561803.53	9561803.53	9561803.54	0.0070	0.0070
Mercury	21467-06-21 00:57 G	9561891.49	9561891.54	9561891.62	0.0070	0.0061
Mercury	21467-09-17 01:55 G	9561979.50	9561979.58	9561979.67	0.0070	0.0051
Mercury	21467-12-14 02:24 G	9562067.50	9562067.60	9562067.71	0.0070	0.0042
Mercury	21468-03-11 03:07 G	9562155.52	9562155.63	9562155.75	0.0070	0.0033
Mercury	21468-06-07 03:36 G	9562243.53	9562243.65	9562243.78	0.0071	0.0024
Mercury	21468-09-03 04:19 G	9562331.56	9562331.68	9562331.81	0.0071	0.0014
Mercury	21468-11-30 05:02 G	9562419.58	9562419.71	9562419.84	0.0071	0.0004
Mercury	21469-02-26 05:31 G	9562507.61	9562507.73	9562507.87	0.0071	0.0006
Mercury	21469-05-25 06:14 G	9562595.63	9562595.76	9562595.89	0.0071	0.0015
Mercury	21469-08-21 06:43 G	9562683.67	9562683.78	9562683.91	0.0071	0.0025
Mercury	21469-11-17 07:40 G	9562771.70	9562771.82	9562771.93	0.0071	0.0035
Mercury	21470-02-13 08:09 G	9562859.74	9562859.84	9562859.95	0.0071	0.0045
Mercury	21470-05-12 08:38 G	9562947.79	9562947.86	9562947.96	0.0071	0.0055
Mercury	21470-08-08 09:21 G	9563035.84	9563035.89	9563035.95	0.0072	0.0065
Earth	21541-04-03 20:38 G	9588841.29	9588841.36	9588841.46	0.0080	0.0076
Moon	21541-04-03 23:45 G	9588841.48	9588841.49	9588841.57	0.0080	0.0080
Venus	21546-08-24 00:28 G	9590809.32	9590809.52	9590809.74	0.0077	0.0025
Venus	21547-04-06 09:21 G	9591034.74	9591034.89	9591035.08	0.0077	0.0048

Mercury	21553-05-05 22:33 G	9593256.34	9593256.44	9593256.56	0.0074	0.0061
Mercury	21553-08-02 00:57 G	9593344.40	9593344.54	9593344.71	0.0073	0.0045
Mercury	21553-10-29 03:36 G	9593432.48	9593432.65	9593432.84	0.0073	0.0029
Mercury	21554-01-25 06:14 G	9593520.57	9593520.76	9593520.96	0.0073	0.0012
Mercury	21554-04-23 08:38 G	9593608.67	9593608.86	9593609.06	0.0073	0.0004
Mercury	21554-07-20 11:16 G	9593696.78	9593696.97	9593697.16	0.0073	0.0019
Mercury	21554-10-16 13:26 G	9593784.90	9593785.06	9593785.24	0.0073	0.0035
Mercury	21555-01-12 15:36 G	9593873.03	9593873.15	9593873.31	0.0073	0.0051
Mercury	21555-04-10 18:14 G	9593961.19	9593961.26	9593961.35	0.0073	0.0066
Earth	21700-10-07 09:21 G	9647101.63	9647101.89	9647102.15	0.0064	0.0000
Moon	21700-10-07 12:28 G	9647101.76	9647102.02	9647102.28	0.0064	0.0002 *
Venus	21707-07-09 17:16 G	9649568.07	9649568.22	9649568.40	0.0067	0.0043
Venus	21708-02-19 22:33 G	9649793.22	9649793.44	9649793.66	0.0067	0.0004
Venus	21708-10-02 02:38 G	9650018.50	9650018.61	9650018.78	0.0067	0.0052
Mercury	21715-04-22 10:04 G	9652411.88	9652411.92	9652411.98	0.0070	0.0063
Mercury	21715-07-19 10:33 G	9652499.87	9652499.94	9652500.04	0.0070	0.0054
Mercury	21715-10-15 11:16 G	9652587.88	9652587.97	9652588.08	0.0070	0.0045
Mercury	21716-01-11 12:00 G	9652675.89	9652676.00	9652676.12	0.0070	0.0035
Mercury	21716-04-08 12:28 G	9652763.91	9652764.02	9652764.15	0.0070	0.0026
Mercury	21716-07-05 13:12 G	9652851.93	9652852.05	9652852.18	0.0071	0.0017
Mercury	21716-10-01 13:55 G	9652939.95	9652940.08	9652940.21	0.0071	0.0007
Mercury	21716-12-28 14:24 G	9653027.97	9653028.10	9653028.24	0.0071	0.0004
Mercury	21717-03-26 15:07 G	9653116.00	9653116.13	9653116.26	0.0071	0.0012
Mercury	21717-06-22 15:36 G	9653204.03	9653204.15	9653204.28	0.0071	0.0022
Mercury	21717-09-18 16:19 G	9653292.07	9653292.18	9653292.30	0.0071	0.0032
Mercury	21717-12-15 17:02 G	9653380.11	9653380.21	9653380.32	0.0071	0.0042
Mercury	21718-03-13 17:31 G	9653468.15	9653468.23	9653468.33	0.0071	0.0052
Mercury	21718-06-09 18:14 G	9653556.20	9653556.26	9653556.33	0.0071	0.0062
Moon	21789-04-06 08:38 G	9679424.78	9679424.86	9679425.00	0.0080	0.0072
Earth	21789-04-06 12:43 G	9679424.93	9679425.03	9679425.13	0.0080	0.0074 *



Venus	21794-07-28 09:07 G	9681363.68	9681363.88	9681364.10	0.0077	0.0024
Venus	21795-03-10 18:28 G	9681589.10	9681589.27	9681589.44	0.0077	0.0049
Mercury	21801-03-07 04:19 G	9683776.61	9683776.68	9683776.76	0.0074	0.0068
Mercury	21801-06-03 06:43 G	9683864.65	9683864.78	9683864.93	0.0074	0.0052
Mercury	21801-08-30 09:21 G	9683952.72	9683952.89	9683953.07	0.0073	0.0035
Mercury	21801-11-26 11:45 G	9684040.81	9684040.99	9684041.19	0.0073	0.0020
Mercury	21802-02-22 14:24 G	9684128.91	9684129.10	9684129.30	0.0073	0.0004
Mercury	21802-05-21 16:48 G	9684217.01	9684217.20	9684217.40	0.0073	0.0013
Mercury	21802-08-17 19:12 G	9684305.13	9684305.30	9684305.49	0.0073	0.0028
Mercury	21802-11-13 21:21 G	9684393.25	9684393.39	9684393.57	0.0073	0.0044
Mercury	21803-02-10 00:14 G	9684481.40	9684481.51	9684481.62	0.0073	0.0059
Moon	21948-10-10 19:26 G	9737685.07	9737685.31	9737685.57	0.0064	0.0007
Earth	21948-10-10 22:04 G	9737685.17	9737685.42	9737685.68	0.0064	0.0005 *
Venus	21955-06-14 00:57 G	9740122.40	9740122.54	9740122.72	0.0067	0.0045
Venus	21956-01-25 06:14 G	9740347.54	9740347.76	9740347.98	0.0067	0.0002
Venus	21956-09-06 10:48 G	9740572.82	9740572.95	9740573.11	0.0067	0.0050
Mercury	21963-02-21 18:28 G	9742932.26	9742932.27	9742932.29	0.0070	0.0069
Mercury	21963-05-20 18:57 G	9743020.24	9743020.29	9743020.37	0.0070	0.0060
Mercury	21963-08-16 19:26 G	9743108.24	9743108.31	9743108.42	0.0070	0.0052
Mercury	21963-11-12 20:24 G	9743196.25	9743196.35	9743196.46	0.0070	0.0041
Mercury	21964-02-08 20:52 G	9743284.26	9743284.37	9743284.49	0.0070	0.0032
Mercury	21964-05-06 21:36 G	9743372.28	9743372.40	9743372.53	0.0070	0.0023
Mercury	21964-08-02 22:04 G	9743460.30	9743460.42	9743460.56	0.0071	0.0014
Mercury	21964-10-29 22:48 G	9743548.32	9743548.45	9743548.58	0.0071	0.0004
Mercury	21965-01-25 23:31 G	9743636.35	9743636.48	9743636.61	0.0071	0.0006
Mercury	21965-04-24 00:00 G	9743724.38	9743724.50	9743724.63	0.0071	0.0016
Mercury	21965-07-21 00:43 G	9743812.41	9743812.53	9743812.65	0.0071	0.0025
Mercury	21965-10-17 01:12 G	9743900.44	9743900.55	9743900.67	0.0071	0.0036
Mercury	21966-01-13 01:55 G	9743988.48	9743988.58	9743988.69	0.0071	0.0045
Mercury	21966-04-11 02:24 G	9744076.53	9744076.60	9744076.69	0.0071	0.0056

Mercury 21966-07-08 03:07 G 9744164.59 9744164.63 9744164.69 0.0072 0.0065

# 23RD MILLENNIUM CE

**This is a list of transits visible from Pluto in the 23rd millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Earth	22037-04-10 01:26	G	9770008.55	9770008.56	9770008.63	0.0080	0.0079	
Moon	22037-04-10 05:16	G	9770008.64	9770008.72	9770008.83	0.0080	0.0075	
Moon	22038-04-12 04:33	G	9770375.67	9770375.69	9770375.73	0.0080	0.0079	
Venus	22042-07-02 16:19	G	9771917.99	9771918.18	9771918.40	0.0077	0.0028	
Venus	22043-02-13 01:40	G	9772143.40	9772143.57	9772143.76	0.0077	0.0046	
Mercury	22049-04-03 11:45	G	9774384.90	9774384.99	9774385.11	0.0074	0.0062	
Mercury	22049-06-30 14:24	G	9774472.96	9774473.10	9774473.27	0.0073	0.0046	
Mercury	22049-09-26 16:48	G	9774561.03	9774561.20	9774561.40	0.0073	0.0030	
Mercury	22049-12-23 19:26	G	9774649.12	9774649.31	9774649.51	0.0073	0.0013	
Mercury	22050-03-21 22:04	G	9774737.22	9774737.42	9774737.62	0.0073	0.0003	
Mercury	22050-06-18 00:14	G	9774825.33	9774825.51	9774825.72	0.0073	0.0019	
Mercury	22050-09-14 02:38	G	9774913.45	9774913.61	9774913.80	0.0073	0.0035	
Mercury	22050-12-11 05:16	G	9775001.59	9775001.72	9775001.87	0.0073	0.0050	
Mercury	22051-03-09 07:26	G	9775089.75	9775089.81	9775089.91	0.0073	0.0066	
Earth	22196-10-13 08:52	G	9828268.62	9828268.87	9828269.12	0.0064	0.0014	
Moon	22196-10-13 09:36	G	9828268.65	9828268.90	9828269.17	0.0064	0.0017	*
Venus	22203-05-19 07:26	G	9830676.68	9830676.81	9830676.97	0.0066	0.0051	

Venus	22203-12-30 12:43 G	9830901.81	9830902.03	9830902.25	0.0067	0.0004
Venus	22204-08-11 17:02 G	9831127.07	9831127.21	9831127.40	0.0067	0.0044
Mercury	22211-03-22 02:52 G	9833540.61	9833540.62	9833540.66	0.0070	0.0069
Mercury	22211-06-18 03:50 G	9833628.59	9833628.66	9833628.73	0.0070	0.0059
Mercury	22211-09-14 04:19 G	9833716.60	9833716.68	9833716.78	0.0070	0.0050
Mercury	22211-12-11 04:48 G	9833804.60	9833804.70	9833804.82	0.0070	0.0041
Mercury	22212-03-08 05:31 G	9833892.62	9833892.73	9833892.85	0.0070	0.0032
Mercury	22212-06-04 06:00 G	9833980.64	9833980.75	9833980.89	0.0070	0.0023
Mercury	22212-08-31 06:43 G	9834068.66	9834068.78	9834068.92	0.0071	0.0013
Mercury	22212-11-27 07:26 G	9834156.68	9834156.81	9834156.94	0.0071	0.0003
Mercury	22213-02-23 08:09 G	9834244.71	9834244.84	9834244.97	0.0071	0.0007
Mercury	22213-05-22 08:38 G	9834332.74	9834332.86	9834332.99	0.0071	0.0016
Mercury	22213-08-18 09:21 G	9834420.77	9834420.89	9834421.01	0.0071	0.0026
Mercury	22213-11-14 09:50 G	9834508.80	9834508.91	9834509.03	0.0071	0.0036
Mercury	22214-02-10 10:19 G	9834596.84	9834596.93	9834597.04	0.0071	0.0046
Mercury	22214-05-09 10:48 G	9834684.89	9834684.95	9834685.05	0.0071	0.0057
Mercury	22214-08-05 11:31 G	9834772.95	9834772.98	9834773.04	0.0071	0.0067
Earth	22286-04-15 14:24 G	9860958.96	9860959.10	9860959.30	0.0080	0.0060
Moon	22286-04-15 16:04 G	9860959.02	9860959.17	9860959.37	0.0080	0.0060 *
Venus	22290-06-06 20:52 G	9862472.21	9862472.37	9862472.57	0.0077	0.0044
Venus	22291-01-18 06:14 G	9862697.57	9862697.76	9862697.98	0.0077	0.0030
Mercury	22297-05-01 17:45 G	9864993.16	9864993.24	9864993.36	0.0074	0.0064
Mercury	22297-07-28 20:38 G	9865081.22	9865081.36	9865081.52	0.0074	0.0047
Mercury	22297-10-24 23:02 G	9865169.29	9865169.46	9865169.65	0.0073	0.0031
Mercury	22298-01-21 01:40 G	9865257.38	9865257.57	9865257.77	0.0073	0.0014
Mercury	22298-04-19 04:19 G	9865345.48	9865345.68	9865345.88	0.0073	0.0002
Mercury	22298-07-16 06:28 G	9865433.59	9865433.77	9865433.97	0.0073	0.0018
Mercury	22298-10-12 08:52 G	9865521.71	9865521.87	9865522.06	0.0073	0.0034
Mercury	22299-01-08 11:31 G	9865609.84	9865609.98	9865610.13	0.0073	0.0049
Mercury	22299-04-06 13:40 G	9865698.00	9865698.07	9865698.17	0.0073	0.0065

Mars	22443-11-22 07:26 G	9918522.62	9918522.81	9918523.05	0.0064	0.0043
Earth	22444-10-16 17:45 G	9918852.02	9918852.24	9918852.48	0.0064	0.0029
Moon	22444-10-16 17:31 G	9918852.02	9918852.23	9918852.47	0.0064	0.0028 *
Moon	22445-10-18 02:52 G	9919218.49	9919218.62	9919218.81	0.0064	0.0052
Earth	22445-10-18 05:31 G	9919218.61	9919218.73	9919218.89	0.0064	0.0054 *
Venus	22451-04-22 13:12 G	9921230.98	9921231.05	9921231.15	0.0066	0.0061
Venus	22451-12-03 18:14 G	9921456.04	9921456.26	9921456.48	0.0067	0.0014
Venus	22452-07-15 23:02 G	9921681.28	9921681.46	9921681.66	0.0067	0.0033
Mercury	22459-04-18 11:31 G	9924148.98	9924148.98	9924149.00	0.0070	0.0070
Mercury	22459-07-15 12:14 G	9924236.95	9924237.01	9924237.07	0.0070	0.0060
Mercury	22459-10-11 12:43 G	9924324.95	9924325.03	9924325.12	0.0070	0.0051
Mercury	22460-01-07 13:12 G	9924412.96	9924413.05	9924413.16	0.0070	0.0042
Mercury	22460-04-04 13:55 G	9924500.97	9924501.08	9924501.20	0.0070	0.0033
Mercury	22460-07-01 14:24 G	9924588.98	9924589.10	9924589.23	0.0070	0.0023
Mercury	22460-09-27 15:07 G	9924677.00	9924677.13	9924677.26	0.0071	0.0014
Mercury	22460-12-24 15:50 G	9924765.03	9924765.16	9924765.29	0.0071	0.0004
Mercury	22461-03-22 16:33 G	9924853.05	9924853.19	9924853.32	0.0071	0.0006
Mercury	22461-06-18 17:02 G	9924941.08	9924941.21	9924941.34	0.0071	0.0015
Mercury	22461-09-14 17:31 G	9925029.11	9925029.23	9925029.36	0.0071	0.0025
Mercury	22461-12-11 18:14 G	9925117.15	9925117.26	9925117.38	0.0071	0.0035
Mercury	22462-03-09 18:43 G	9925205.19	9925205.28	9925205.39	0.0071	0.0045
Mercury	22462-06-05 19:12 G	9925293.23	9925293.30	9925293.40	0.0071	0.0056
Mercury	22462-09-01 19:55 G	9925381.29	9925381.33	9925381.40	0.0071	0.0065
Mars	22533-04-27 00:14 G	9951185.24	9951185.51	9951185.84	0.0080	0.0038
Earth	22534-04-18 23:02 G	9951542.25	9951542.46	9951542.71	0.0080	0.0036
Moon	22534-04-18 23:45 G	9951542.29	9951542.49	9951542.72	0.0080	0.0040 *
Venus	22538-05-12 01:40 G	9953026.44	9953026.57	9953026.71	0.0077	0.0061
Venus	22538-12-23 10:48 G	9953251.74	9953251.95	9953252.18	0.0077	0.0014
Mercury	22545-05-30 00:00 G	9955601.42	9955601.50	9955601.60	0.0074	0.0065
Mercury	22545-08-26 02:24 G	9955689.47	9955689.60	9955689.77	0.0074	0.0049

Mercury	22545-11-22 05:16 G	9955777.54	9955777.72	9955777.90	0.0073	0.0032
Mercury	22546-02-18 07:55 G	9955865.63	9955865.83	9955866.02	0.0073	0.0016
Mercury	22546-05-17 10:19 G	9955953.73	9955953.93	9955954.13	0.0073	0.0000
Mercury	22546-08-13 12:43 G	9956041.84	9956042.03	9956042.23	0.0073	0.0016
Mercury	22546-11-09 15:07 G	9956129.96	9956130.13	9956130.31	0.0073	0.0032
Mercury	22547-02-05 17:31 G	9956218.09	9956218.23	9956218.39	0.0073	0.0048
Mercury	22547-05-04 19:40 G	9956306.25	9956306.32	9956306.43	0.0073	0.0064
Mars	22692-03-03 03:07 G	10009204.35	10009204.63	10009204.92	0.0064	0.0017
Moon	22692-10-19 22:48 G	10009435.30	10009435.45	10009435.67	0.0064	0.0046
Earth	22692-10-20 01:26 G	10009435.40	10009435.56	10009435.74	0.0064	0.0048 *
Earth	22693-10-21 12:43 G	10009801.84	10009802.03	10009802.28	0.0064	0.0034
Moon	22693-10-21 15:50 G	10009801.96	10009802.16	10009802.40	0.0064	0.0032 *
Venus	22699-11-07 22:19 G	10012010.24	10012010.43	10012010.64	0.0066	0.0029
Venus	22700-06-21 03:21 G	10012235.43	10012235.64	10012235.85	0.0067	0.0018
Venus	22701-02-01 07:40 G	10012460.81	10012460.82	10012460.88	0.0067	0.0066
Mercury	22707-08-13 20:09 G	10014845.29	10014845.34	10014845.39	0.0070	0.0064
Mercury	22707-11-09 20:38 G	10014933.29	10014933.36	10014933.45	0.0070	0.0055
Mercury	22708-02-05 21:21 G	10015021.29	10015021.39	10015021.49	0.0070	0.0046
Mercury	22708-05-03 21:50 G	10015109.30	10015109.41	10015109.53	0.0070	0.0036
Mercury	22708-07-30 22:33 G	10015197.32	10015197.44	10015197.56	0.0070	0.0027
Mercury	22708-10-26 23:02 G	10015285.34	10015285.46	10015285.59	0.0070	0.0018
Mercury	22709-01-22 23:45 G	10015373.36	10015373.49	10015373.62	0.0071	0.0008
Mercury	22709-04-21 00:28 G	10015461.38	10015461.52	10015461.65	0.0071	0.0003
Mercury	22709-07-18 00:57 G	10015549.41	10015549.54	10015549.67	0.0071	0.0012
Mercury	22709-10-14 01:40 G	10015637.44	10015637.57	10015637.69	0.0071	0.0021
Mercury	22710-01-10 02:09 G	10015725.48	10015725.59	10015725.71	0.0071	0.0031
Mercury	22710-04-08 02:38 G	10015813.51	10015813.61	10015813.73	0.0071	0.0041
Mercury	22710-07-05 03:07 G	10015901.56	10015901.63	10015901.74	0.0071	0.0052
Mercury	22710-10-01 03:50 G	10015989.61	10015989.66	10015989.74	0.0071	0.0061
Mercury	22710-12-28 04:33 G	10016077.69	10016077.69	10016077.71	0.0071	0.0071

Mars	22781-08-06 04:48 G	10041866.36	10041866.70	10041867.04	0.0080	0.0001
Moon	22782-04-22 00:57 G	10042125.28	10042125.54	10042125.81	0.0080	0.0005
Earth	22782-04-22 02:38 G	10042125.36	10042125.61	10042125.87	0.0080	0.0005 *
Venus	22786-11-27 12:28 G	10043805.81	10043806.02	10043806.25	0.0077	0.0016
Venus	22787-07-10 21:07 G	10044031.26	10044031.38	10044031.55	0.0077	0.0058
Mercury	22793-06-27 04:48 G	10046209.70	10046209.70	10046209.71	0.0074	0.0074
Mercury	22793-09-23 07:26 G	10046297.69	10046297.81	10046297.93	0.0074	0.0057
Mercury	22793-12-20 09:50 G	10046385.75	10046385.91	10046386.08	0.0073	0.0041
Mercury	22794-03-18 12:14 G	10046473.84	10046474.01	10046474.21	0.0073	0.0025
Mercury	22794-06-14 14:52 G	10046561.93	10046562.12	10046562.32	0.0073	0.0008
Mercury	22794-09-10 17:31 G	10046650.03	10046650.23	10046650.43	0.0073	0.0008
Mercury	22794-12-07 19:40 G	10046738.15	10046738.32	10046738.52	0.0073	0.0024
Mercury	22795-03-05 22:04 G	10046826.27	10046826.42	10046826.60	0.0073	0.0040
Mercury	22795-06-02 00:28 G	10046914.41	10046914.52	10046914.66	0.0073	0.0056
Mercury	22795-08-29 02:38 G	10047002.60	10047002.61	10047002.67	0.0073	0.0072
Mars	22940-06-12 20:52 G	10099886.08	10099886.37	10099886.67	0.0064	0.0004
Moon	22941-10-24 15:36 G	10100384.90	10100385.15	10100385.41	0.0064	0.0013
Earth	22941-10-24 19:26 G	10100385.06	10100385.31	10100385.57	0.0064	0.0011 *
Venus	22947-10-13 02:09 G	10102564.44	10102564.59	10102564.76	0.0066	0.0046
Venus	22948-05-25 07:12 G	10102789.58	10102789.80	10102790.02	0.0067	0.0002
Venus	22949-01-05 11:31 G	10103014.85	10103014.98	10103015.15	0.0067	0.0049
Mercury	22955-09-10 03:50 G	10105453.65	10105453.66	10105453.69	0.0070	0.0069
Mercury	22955-12-07 04:48 G	10105541.63	10105541.70	10105541.76	0.0070	0.0059
Mercury	22956-03-04 05:02 G	10105629.63	10105629.71	10105629.81	0.0070	0.0050
Mercury	22956-05-31 05:31 G	10105717.64	10105717.73	10105717.85	0.0070	0.0042
Mercury	22956-08-27 06:14 G	10105805.65	10105805.76	10105805.89	0.0070	0.0032
Mercury	22956-11-23 06:57 G	10105893.67	10105893.79	10105893.92	0.0070	0.0022
Mercury	22957-02-19 07:40 G	10105981.69	10105981.82	10105981.95	0.0071	0.0012
Mercury	22957-05-18 08:09 G	10106069.71	10106069.84	10106069.98	0.0071	0.0004
Mercury	22957-08-14 08:52 G	10106157.74	10106157.87	10106158.00	0.0071	0.0007

Mercury	22957-11-10 09:21 G	10106245.77	10106245.89	10106246.02	0.0071	0.0017
Mercury	22958-02-06 09:50 G	10106333.80	10106333.91	10106334.04	0.0071	0.0027
Mercury	22958-05-05 10:48 G	10106421.84	10106421.95	10106422.06	0.0071	0.0036
Mercury	22958-08-01 11:16 G	10106509.88	10106509.97	10106510.07	0.0071	0.0046
Mercury	22958-10-28 11:45 G	10106597.92	10106597.99	10106598.08	0.0071	0.0057
Mercury	22959-01-24 12:28 G	10106685.98	10106686.02	10106686.07	0.0071	0.0067

# 24TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 24th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mars	23029-11-15 10:33 G		10132547.69	10132547.94	10132548.27	0.0080	0.0043	
Earth	23030-04-25 06:57 G		10132708.58	10132708.79	10132709.02	0.0080	0.0042	
Moon	23030-04-25 09:50 G		10132708.72	10132708.91	10132709.13	0.0080	0.0047	*
Venus	23034-11-01 14:38 G		10134359.95	10134360.11	10134360.31	0.0077	0.0043	
Venus	23035-06-15 00:00 G		10134585.31	10134585.50	10134585.71	0.0077	0.0031	
Mercury	23041-10-21 11:45 G		10136905.92	10136905.99	10136906.11	0.0074	0.0065	
Mercury	23042-01-17 14:38 G		10136993.97	10136994.11	10136994.27	0.0074	0.0048	
Mercury	23042-04-15 17:02 G		10137082.04	10137082.21	10137082.40	0.0073	0.0032	
Mercury	23042-07-12 19:40 G		10137170.13	10137170.32	10137170.52	0.0073	0.0015	
Mercury	23042-10-08 22:19 G		10137258.23	10137258.43	10137258.63	0.0073	0.0001	
Mercury	23043-01-05 00:43 G		10137346.34	10137346.53	10137346.73	0.0073	0.0017	
Mercury	23043-04-03 03:07 G		10137434.46	10137434.63	10137434.81	0.0073	0.0033	

Mercury	23043-06-30 05:31 G	10137522.59	10137522.73	10137522.89	0.0073	0.0049
Mercury	23043-09-26 07:40 G	10137610.75	10137610.82	10137610.93	0.0073	0.0065
Mars	23188-09-22 11:02 G	10190567.69	10190567.96	10190568.25	0.0064	0.0016
Earth	23189-10-27 23:31 G	10190968.24	10190968.48	10190968.74	0.0064	0.0017
Moon	23189-10-28 02:52 G	10190968.37	10190968.62	10190968.88	0.0064	0.0014 *
Moon	23190-10-29 08:38 G	10191334.85	10191334.86	10191334.94	0.0064	0.0064
Venus	23196-04-29 09:21 G	10193343.69	10193343.89	10193344.11	0.0066	0.0021
Venus	23196-12-10 14:09 G	10193568.89	10193569.09	10193569.30	0.0067	0.0026
Mercury	23204-01-04 12:00 G	10196149.97	10196150.00	10196150.04	0.0070	0.0067
Mercury	23204-04-01 12:28 G	10196237.96	10196238.02	10196238.10	0.0070	0.0058
Mercury	23204-06-28 13:12 G	10196325.96	10196326.05	10196326.15	0.0070	0.0049
Mercury	23204-09-24 13:40 G	10196413.97	10196414.07	10196414.19	0.0070	0.0039
Mercury	23204-12-21 14:09 G	10196501.98	10196502.09	10196502.22	0.0070	0.0030
Mercury	23205-03-19 14:52 G	10196590.00	10196590.12	10196590.25	0.0070	0.0021
Mercury	23205-06-15 15:36 G	10196678.02	10196678.15	10196678.28	0.0070	0.0011
Mercury	23205-09-11 16:19 G	10196766.05	10196766.18	10196766.31	0.0071	0.0002
Mercury	23205-12-08 16:48 G	10196854.07	10196854.20	10196854.33	0.0071	0.0009
Mercury	23206-03-06 17:16 G	10196942.10	10196942.22	10196942.35	0.0071	0.0019
Mercury	23206-06-02 18:00 G	10197030.13	10197030.25	10197030.37	0.0071	0.0028
Mercury	23206-08-29 18:28 G	10197118.17	10197118.27	10197118.39	0.0071	0.0038
Mercury	23206-11-25 19:12 G	10197206.21	10197206.30	10197206.40	0.0071	0.0048
Mercury	23207-02-21 19:40 G	10197294.26	10197294.32	10197294.41	0.0071	0.0058
Mercury	23207-05-20 20:09 G	10197382.32	10197382.34	10197382.39	0.0071	0.0069
Mars	23278-02-23 03:07 G	10223228.39	10223228.63	10223228.94	0.0080	0.0048
Earth	23279-04-29 09:50 G	10223658.76	10223658.91	10223659.09	0.0079	0.0061
Moon	23279-04-29 13:40 G	10223658.91	10223659.07	10223659.24	0.0079	0.0061 *
Venus	23283-05-18 23:16 G	10225139.25	10225139.47	10225139.69	0.0077	0.0009
Venus	23283-12-30 08:09 G	10225364.73	10225364.84	10225364.97	0.0077	0.0064
Mercury	23290-02-13 17:31 G	10227602.16	10227602.23	10227602.35	0.0074	0.0064
Mercury	23290-05-12 20:24 G	10227690.21	10227690.35	10227690.51	0.0074	0.0047



Mercury	23290-08-08 22:48 G	10227778.29	10227778.45	10227778.65	0.0073	0.0031
Mercury	23290-11-05 01:26 G	10227866.38	10227866.56	10227866.76	0.0073	0.0014
Mercury	23291-02-01 04:04 G	10227954.48	10227954.67	10227954.87	0.0073	0.0003
Mercury	23291-04-30 06:43 G	10228042.59	10228042.78	10228042.97	0.0073	0.0018
Mercury	23291-07-27 09:07 G	10228130.71	10228130.88	10228131.06	0.0073	0.0034
Mercury	23291-10-23 11:31 G	10228218.84	10228218.98	10228219.13	0.0073	0.0050
Mercury	23292-01-19 13:55 G	10228307.01	10228307.08	10228307.17	0.0073	0.0066
Mars	23437-01-01 22:19 G	10281249.16	10281249.43	10281249.70	0.0064	0.0024
Moon	23437-10-31 00:28 G	10281551.35	10281551.52	10281551.68	0.0064	0.0048
Earth	23437-10-31 02:38 G	10281551.46	10281551.61	10281551.81	0.0064	0.0047 *
Earth	23438-11-01 14:24 G	10281917.91	10281918.10	10281918.35	0.0064	0.0036
Moon	23438-11-01 15:07 G	10281917.94	10281918.13	10281918.38	0.0064	0.0038 *
Venus	23444-04-03 11:02 G	10283897.82	10283897.96	10283898.15	0.0066	0.0045
Venus	23444-11-14 16:19 G	10284122.96	10284123.18	10284123.40	0.0067	0.0002
Venus	23445-06-27 20:52 G	10284348.23	10284348.37	10284348.52	0.0067	0.0049
Mercury	23452-04-29 19:55 G	10286846.30	10286846.33	10286846.38	0.0070	0.0066
Mercury	23452-07-26 20:24 G	10286934.29	10286934.35	10286934.43	0.0070	0.0057
Mercury	23452-10-22 21:07 G	10287022.29	10287022.38	10287022.48	0.0070	0.0047
Mercury	23453-01-18 21:36 G	10287110.30	10287110.40	10287110.52	0.0070	0.0038
Mercury	23453-04-16 22:19 G	10287198.31	10287198.43	10287198.55	0.0070	0.0029
Mercury	23453-07-13 22:48 G	10287286.33	10287286.45	10287286.58	0.0070	0.0020
Mercury	23453-10-09 23:31 G	10287374.35	10287374.48	10287374.61	0.0070	0.0010
Mercury	23454-01-06 00:14 G	10287462.38	10287462.51	10287462.64	0.0071	0.0001
Mercury	23454-04-04 00:43 G	10287550.40	10287550.53	10287550.66	0.0071	0.0010
Mercury	23454-07-01 01:12 G	10287638.43	10287638.55	10287638.69	0.0071	0.0020
Mercury	23454-09-27 01:55 G	10287726.47	10287726.58	10287726.70	0.0071	0.0030
Mercury	23454-12-24 02:38 G	10287814.50	10287814.61	10287814.72	0.0071	0.0039
Mercury	23455-03-22 03:07 G	10287902.54	10287902.63	10287902.73	0.0071	0.0050
Mercury	23455-06-18 03:50 G	10287990.59	10287990.66	10287990.73	0.0071	0.0060
Mercury	23455-09-14 04:19 G	10288078.66	10288078.68	10288078.72	0.0071	0.0070

Mars	23526-06-04 23:02 G	10313909.27	10313909.46	10313909.70	0.0080	0.0062
Moon	23527-05-03 08:09 G	10314241.59	10314241.84	10314242.10	0.0080	0.0005
Earth	23527-05-03 10:19 G	10314241.68	10314241.93	10314242.19	0.0080	0.0009 *
Venus	23531-04-23 22:48 G	10315693.29	10315693.45	10315693.64	0.0077	0.0048
Venus	23531-12-05 08:09 G	10315918.64	10315918.84	10315919.05	0.0077	0.0027
Mercury	23538-06-10 23:45 G	10318298.40	10318298.49	10318298.62	0.0074	0.0061
Mercury	23538-09-07 02:38 G	10318386.46	10318386.61	10318386.77	0.0074	0.0044
Mercury	23538-12-04 05:02 G	10318474.54	10318474.71	10318474.90	0.0073	0.0027
Mercury	23539-03-02 07:40 G	10318562.63	10318562.82	10318563.02	0.0073	0.0011
Mercury	23539-05-29 10:19 G	10318650.73	10318650.93	10318651.13	0.0073	0.0005
Mercury	23539-08-25 12:28 G	10318738.84	10318739.02	10318739.22	0.0073	0.0022
Mercury	23539-11-21 14:52 G	10318826.97	10318827.12	10318827.31	0.0073	0.0038
Mercury	23540-02-17 17:16 G	10318915.11	10318915.22	10318915.37	0.0073	0.0054
Mercury	23540-05-15 20:09 G	10319003.28	10319003.34	10319003.40	0.0073	0.0069
Mars	23685-04-12 05:31 G	10371930.48	10371930.73	10371931.03	0.0064	0.0022
Earth	23686-11-03 15:50 G	10372500.90	10372501.16	10372501.42	0.0064	0.0003
Moon	23686-11-03 16:33 G	10372500.94	10372501.19	10372501.44	0.0064	0.0001 *
Venus	23692-10-18 16:04 G	10374676.99	10374677.17	10374677.39	0.0066	0.0030
Venus	23693-05-31 21:07 G	10374902.17	10374902.38	10374902.60	0.0067	0.0018
Venus	23694-01-12 01:12 G	10375127.54	10375127.55	10375127.62	0.0067	0.0066
Mercury	23700-08-24 03:07 G	10377542.63	10377542.63	10377542.66	0.0070	0.0069
Mercury	23700-11-20 03:36 G	10377630.60	10377630.65	10377630.73	0.0070	0.0060
Mercury	23701-02-16 04:33 G	10377718.60	10377718.69	10377718.78	0.0070	0.0050
Mercury	23701-05-15 05:02 G	10377806.61	10377806.71	10377806.82	0.0070	0.0041
Mercury	23701-08-11 05:45 G	10377894.62	10377894.74	10377894.86	0.0070	0.0031
Mercury	23701-11-07 06:14 G	10377982.64	10377982.76	10377982.89	0.0070	0.0022
Mercury	23702-02-03 06:57 G	10378070.66	10378070.79	10378070.92	0.0070	0.0012
Mercury	23702-05-02 07:26 G	10378158.68	10378158.81	10378158.95	0.0071	0.0003
Mercury	23702-07-29 08:09 G	10378246.71	10378246.84	10378246.97	0.0071	0.0007
Mercury	23702-10-25 08:38 G	10378334.74	10378334.86	10378334.99	0.0071	0.0017

Mercury	23703-01-21 09:07 G	10378422.77	10378422.88	10378423.01	0.0071	0.0027
Mercury	23703-04-19 10:04 G	10378510.80	10378510.92	10378511.03	0.0071	0.0036
Mercury	23703-07-16 10:33 G	10378598.84	10378598.94	10378599.04	0.0071	0.0046
Mercury	23703-10-12 11:02 G	10378686.89	10378686.96	10378687.05	0.0071	0.0057
Mercury	23704-01-08 11:45 G	10378774.95	10378774.99	10378775.04	0.0071	0.0067
Mars	23774-09-12 03:36 G	10404589.36	10404589.65	10404589.98	0.0080	0.0034
Earth	23775-05-05 03:21 G	10404824.51	10404824.64	10404824.81	0.0080	0.0065
Moon	23775-05-05 04:19 G	10404824.55	10404824.68	10404824.86	0.0080	0.0065 *
Venus	23779-11-08 04:04 G	10406472.48	10406472.67	10406472.89	0.0077	0.0028
Venus	23780-06-20 13:26 G	10406697.89	10406698.06	10406698.24	0.0077	0.0048
Mercury	23786-10-04 04:04 G	10408994.60	10408994.67	10408994.77	0.0074	0.0067
Mercury	23786-12-31 06:57 G	10409082.65	10409082.79	10409082.94	0.0074	0.0050
Mercury	23787-03-29 09:21 G	10409170.72	10409170.89	10409171.07	0.0073	0.0034
Mercury	23787-06-25 11:45 G	10409258.81	10409258.99	10409259.20	0.0073	0.0018
Mercury	23787-09-21 14:38 G	10409346.91	10409347.11	10409347.31	0.0073	0.0001
Mercury	23787-12-18 16:48 G	10409435.02	10409435.20	10409435.41	0.0073	0.0016
Mercury	23788-03-15 19:12 G	10409523.14	10409523.30	10409523.50	0.0073	0.0032
Mercury	23788-06-11 21:36 G	10409611.27	10409611.40	10409611.57	0.0073	0.0048
Mercury	23788-09-08 00:00 G	10409699.43	10409699.50	10409699.62	0.0073	0.0064
Mars	23933-07-23 12:43 G	10462611.77	10462612.03	10462612.33	0.0063	0.0017
Moon	23934-11-07 12:57 G	10463083.87	10463084.04	10463084.26	0.0064	0.0044
Earth	23934-11-07 15:21 G	10463083.97	10463084.14	10463084.36	0.0064	0.0042 *
Earth	23935-11-09 03:36 G	10463450.47	10463450.65	10463450.87	0.0064	0.0040
Moon	23935-11-09 06:57 G	10463450.63	10463450.79	10463451.01	0.0064	0.0043 *
Venus	23940-09-23 16:04 G	10465231.10	10465231.17	10465231.28	0.0066	0.0061
Venus	23941-05-06 20:52 G	10465456.17	10465456.37	10465456.60	0.0066	0.0014
Venus	23941-12-18 01:12 G	10465681.38	10465681.55	10465681.77	0.0067	0.0034
Mercury	23949-03-16 11:02 G	10468326.92	10468326.96	10468327.03	0.0070	0.0063
Mercury	23949-06-12 12:00 G	10468414.91	10468415.00	10468415.08	0.0070	0.0053
Mercury	23949-09-08 12:14 G	10468502.92	10468503.01	10468503.12	0.0070	0.0044

Mercury	23949-12-05 12:57 G	10468590.93	10468591.04	10468591.16	0.0070	0.0035
Mercury	23950-03-03 13:26 G	10468678.95	10468679.06	10468679.19	0.0070	0.0025
Mercury	23950-05-30 14:09 G	10468766.97	10468767.09	10468767.22	0.0070	0.0016
Mercury	23950-08-26 14:52 G	10468854.99	10468855.12	10468855.25	0.0070	0.0006
Mercury	23950-11-22 15:21 G	10468943.01	10468943.14	10468943.27	0.0071	0.0004
Mercury	23951-02-18 16:04 G	10469031.04	10469031.17	10469031.30	0.0071	0.0014
Mercury	23951-05-17 16:33 G	10469119.07	10469119.19	10469119.32	0.0071	0.0023
Mercury	23951-08-13 17:16 G	10469207.11	10469207.22	10469207.34	0.0071	0.0033
Mercury	23951-11-09 17:45 G	10469295.14	10469295.24	10469295.35	0.0071	0.0043
Mercury	23952-02-05 18:28 G	10469383.19	10469383.27	10469383.36	0.0071	0.0053
Mercury	23952-05-03 18:57 G	10469471.24	10469471.29	10469471.36	0.0071	0.0064

# 25TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 25th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mars	24022-12-21 11:16 G	10495269.64	10495269.97	10495270.32	0.0080	0.0012		
Moon	24024-05-09 00:14 G	10495774.27	10495774.51	10495774.78	0.0080	0.0021		
Earth	24024-05-09 02:38 G	10495774.38	10495774.61	10495774.88	0.0080	0.0025	*	
Venus	24028-05-25 10:33 G	10497251.72	10497251.94	10497252.16	0.0077	0.0003		
Venus	24029-01-05 18:57 G	10497477.23	10497477.29	10497477.40	0.0077	0.0071		
Mercury	24035-01-28 08:24 G	10499690.83	10499690.85	10499690.92	0.0074	0.0072		
Mercury	24035-04-26 11:16 G	10499778.85	10499778.97	10499779.12	0.0074	0.0055		

Mercury	24035-07-23 14:09 G	10499866.92	10499867.09	10499867.26	0.0073	0.0038
Mercury	24035-10-19 16:33 G	10499955.01	10499955.19	10499955.39	0.0073	0.0022
Mercury	24036-01-15 19:12 G	10500043.10	10500043.30	10500043.50	0.0073	0.0005
Mercury	24036-04-12 21:50 G	10500131.21	10500131.41	10500131.60	0.0073	0.0011
Mercury	24036-07-10 00:00 G	10500219.33	10500219.50	10500219.69	0.0073	0.0028
Mercury	24036-10-06 02:24 G	10500307.46	10500307.60	10500307.77	0.0073	0.0044
Mercury	24037-01-02 04:48 G	10500395.61	10500395.70	10500395.83	0.0073	0.0060
Mars	24181-10-31 17:16 G	10553292.93	10553293.22	10553293.51	0.0063	0.0001
Moon	24183-11-10 21:50 G	10554033.15	10554033.41	10554033.67	0.0064	0.0004
Earth	24183-11-11 01:12 G	10554033.30	10554033.55	10554033.81	0.0064	0.0007 *
Venus	24189-04-09 18:43 G	10556010.18	10556010.28	10556010.44	0.0066	0.0053
Venus	24189-11-20 23:45 G	10556235.28	10556235.49	10556235.72	0.0066	0.0007
Venus	24190-07-04 04:33 G	10556460.52	10556460.69	10556460.86	0.0067	0.0041
Mercury	24197-07-09 18:00 G	10559023.25	10559023.25	10559023.25	0.0070	0.0070
Mercury	24197-10-05 18:14 G	10559111.21	10559111.26	10559111.34	0.0070	0.0061
Mercury	24198-01-01 19:12 G	10559199.21	10559199.30	10559199.39	0.0070	0.0051
Mercury	24198-03-30 19:40 G	10559287.22	10559287.32	10559287.43	0.0070	0.0042
Mercury	24198-06-26 20:24 G	10559375.23	10559375.35	10559375.47	0.0070	0.0032
Mercury	24198-09-22 20:52 G	10559463.25	10559463.37	10559463.50	0.0070	0.0023
Mercury	24198-12-19 21:36 G	10559551.27	10559551.40	10559551.53	0.0070	0.0013
Mercury	24199-03-17 22:04 G	10559639.29	10559639.42	10559639.55	0.0070	0.0004
Mercury	24199-06-13 22:48 G	10559727.32	10559727.45	10559727.58	0.0071	0.0006
Mercury	24199-09-09 23:16 G	10559815.35	10559815.47	10559815.60	0.0071	0.0016
Mercury	24199-12-06 23:45 G	10559903.38	10559903.49	10559903.62	0.0071	0.0026
Mercury	24200-03-05 00:28 G	10559991.41	10559991.52	10559991.64	0.0071	0.0036
Mercury	24200-06-01 00:57 G	10560079.45	10560079.54	10560079.65	0.0071	0.0046
Mercury	24200-08-28 01:26 G	10560167.50	10560167.56	10560167.66	0.0071	0.0056
Mercury	24200-11-24 02:09 G	10560255.56	10560255.59	10560255.65	0.0071	0.0066
Mars	24271-03-31 03:07 G	10585949.41	10585949.63	10585949.92	0.0080	0.0055
Earth	24272-05-11 15:07 G	10586357.01	10586357.13	10586357.27	0.0080	0.0068

Moon	24272-05-11 18:28 G	10586357.14	10586357.27	10586357.42	0.0080	0.0067 *
Venus	24276-04-29 02:52 G	10587805.57	10587805.62	10587805.72	0.0078	0.0073
Venus	24276-12-10 12:28 G	10588030.80	10588031.02	10588031.25	0.0077	0.0004
Mercury	24283-08-20 13:55 G	10590475.03	10590475.08	10590475.16	0.0074	0.0069
Mercury	24283-11-16 16:48 G	10590563.06	10590563.20	10590563.34	0.0074	0.0052
Mercury	24284-02-12 18:57 G	10590651.13	10590651.29	10590651.48	0.0073	0.0036
Mercury	24284-05-10 21:50 G	10590739.22	10590739.41	10590739.61	0.0073	0.0019
Mercury	24284-08-07 00:28 G	10590827.32	10590827.52	10590827.72	0.0073	0.0002
Mercury	24284-11-03 02:52 G	10590915.43	10590915.62	10590915.82	0.0073	0.0014
Mercury	24285-01-30 05:16 G	10591003.55	10591003.72	10591003.91	0.0073	0.0030
Mercury	24285-04-28 07:26 G	10591091.68	10591091.81	10591091.98	0.0073	0.0047
Mercury	24285-07-25 09:50 G	10591179.84	10591179.91	10591180.04	0.0073	0.0063
Mars	24430-02-09 22:04 G	10643974.14	10643974.42	10643974.71	0.0063	0.0016
Earth	24431-11-13 22:33 G	10644616.31	10644616.44	10644616.61	0.0064	0.0052
Moon	24431-11-14 00:57 G	10644616.44	10644616.54	10644616.71	0.0064	0.0055 *
Moon	24432-11-14 09:50 G	10644982.71	10644982.91	10644983.15	0.0064	0.0033
Earth	24432-11-14 11:02 G	10644982.74	10644982.96	10644983.20	0.0064	0.0030 *
Venus	24437-10-25 22:19 G	10646789.27	10646789.43	10646789.60	0.0066	0.0044
Venus	24438-06-08 02:52 G	10647014.40	10647014.62	10647014.84	0.0066	0.0003
Venus	24439-01-19 06:57 G	10647239.67	10647239.79	10647239.96	0.0067	0.0051
Mercury	24446-01-30 01:12 G	10649807.53	10649807.55	10649807.60	0.0070	0.0067
Mercury	24446-04-28 01:40 G	10649895.51	10649895.57	10649895.66	0.0070	0.0058
Mercury	24446-07-25 02:24 G	10649983.52	10649983.60	10649983.71	0.0070	0.0048
Mercury	24446-10-21 02:52 G	10650071.53	10650071.62	10650071.74	0.0070	0.0039
Mercury	24447-01-17 03:36 G	10650159.54	10650159.65	10650159.78	0.0070	0.0030
Mercury	24447-04-15 04:19 G	10650247.56	10650247.68	10650247.81	0.0070	0.0020
Mercury	24447-07-12 05:02 G	10650335.58	10650335.71	10650335.84	0.0070	0.0010
Mercury	24447-10-08 05:31 G	10650423.60	10650423.73	10650423.86	0.0070	0.0002
Mercury	24448-01-04 06:14 G	10650511.63	10650511.76	10650511.89	0.0071	0.0009
Mercury	24448-04-01 06:43 G	10650599.66	10650599.78	10650599.91	0.0071	0.0019

Mercury	24448-06-28 07:26 G	10650687.69	10650687.81	10650687.93	0.0071	0.0029
Mercury	24448-09-24 07:55 G	10650775.73	10650775.83	10650775.94	0.0071	0.0039
Mercury	24448-12-21 08:24 G	10650863.77	10650863.85	10650863.96	0.0071	0.0049
Mercury	24449-03-19 09:07 G	10650951.82	10650951.88	10650951.96	0.0071	0.0059
Mercury	24449-06-15 09:36 G	10651039.89	10651039.90	10651039.94	0.0071	0.0070
Earth	24521-05-16 09:50 G	10677306.65	10677306.91	10677307.17	0.0080	0.0005
Moon	24521-05-16 12:43 G	10677306.76	10677307.03	10677307.29	0.0080	0.0002 *
Venus	24524-11-14 06:14 G	10678584.65	10678584.76	10678584.92	0.0078	0.0061
Venus	24525-06-27 15:50 G	10678809.95	10678810.16	10678810.39	0.0077	0.0015
Mercury	24532-03-11 19:40 G	10681259.24	10681259.32	10681259.44	0.0074	0.0064
Mercury	24532-06-07 22:19 G	10681347.30	10681347.43	10681347.60	0.0074	0.0047
Mercury	24532-09-04 01:12 G	10681435.37	10681435.55	10681435.74	0.0073	0.0030
Mercury	24532-12-01 03:36 G	10681523.46	10681523.65	10681523.86	0.0073	0.0014
Mercury	24533-02-27 06:28 G	10681611.57	10681611.77	10681611.96	0.0073	0.0004
Mercury	24533-05-26 08:38 G	10681699.68	10681699.86	10681700.06	0.0073	0.0020
Mercury	24533-08-22 11:02 G	10681787.80	10681787.96	10681788.15	0.0073	0.0036
Mercury	24533-11-18 13:40 G	10681875.94	10681876.07	10681876.22	0.0073	0.0052
Mercury	24534-02-14 16:04 G	10681964.11	10681964.17	10681964.25	0.0073	0.0068
Mars	24678-05-22 00:28 G	10734655.30	10734655.52	10734655.76	0.0063	0.0039
Moon	24680-11-17 05:31 G	10735565.50	10735565.73	10735566.00	0.0064	0.0021
Earth	24680-11-17 06:28 G	10735565.53	10735565.77	10735566.02	0.0064	0.0022 *
Earth	24681-11-18 18:43 G	10735932.19	10735932.28	10735932.38	0.0064	0.0060
Moon	24681-11-18 21:07 G	10735932.31	10735932.38	10735932.49	0.0064	0.0060 *
Venus	24686-05-12 23:45 G	10737568.32	10737568.49	10737568.67	0.0066	0.0040
Venus	24686-12-24 04:33 G	10737793.47	10737793.69	10737793.91	0.0066	0.0006
Venus	24687-08-06 08:52 G	10738018.76	10738018.87	10738019.01	0.0067	0.0054
Mercury	24694-08-22 08:24 G	10740591.82	10740591.85	10740591.89	0.0070	0.0067
Mercury	24694-11-18 08:52 G	10740679.81	10740679.87	10740679.95	0.0070	0.0058
Mercury	24695-02-14 09:36 G	10740767.81	10740767.90	10740768.00	0.0070	0.0048
Mercury	24695-05-13 10:04 G	10740855.82	10740855.92	10740856.04	0.0070	0.0039

Mercury	24695-08-09 10:48 G	10740943.83	10740943.95	10740944.07	0.0070	0.0029
Mercury	24695-11-05 11:16 G	10741031.85	10741031.97	10741032.10	0.0070	0.0020
Mercury	24696-02-01 12:00 G	10741119.87	10741120.00	10741120.13	0.0070	0.0010
Mercury	24696-04-29 12:43 G	10741207.89	10741208.03	10741208.16	0.0070	0.0002
Mercury	24696-07-26 13:12 G	10741295.92	10741296.05	10741296.18	0.0071	0.0009
Mercury	24696-10-22 13:40 G	10741383.95	10741384.07	10741384.20	0.0071	0.0019
Mercury	24697-01-18 14:24 G	10741471.98	10741472.10	10741472.22	0.0071	0.0029
Mercury	24697-04-16 14:52 G	10741560.02	10741560.12	10741560.24	0.0071	0.0039
Mercury	24697-07-13 15:21 G	10741648.06	10741648.14	10741648.25	0.0071	0.0049
Mercury	24697-10-09 16:04 G	10741736.11	10741736.17	10741736.25	0.0071	0.0059
Mercury	24698-01-05 16:33 G	10741824.18	10741824.19	10741824.23	0.0071	0.0070
Moon	24770-05-20 22:19 G	10768256.27	10768256.43	10768256.64	0.0079	0.0058
Earth	24770-05-20 23:16 G	10768256.33	10768256.47	10768256.66	0.0079	0.0061 *
Venus	24773-06-01 06:57 G	10769363.67	10769363.79	10769363.94	0.0078	0.0062
Venus	24774-01-12 16:19 G	10769588.97	10769589.18	10769589.41	0.0077	0.0015
Mercury	24780-10-02 00:28 G	10772043.43	10772043.52	10772043.61	0.0074	0.0065
Mercury	24780-12-29 02:38 G	10772131.48	10772131.61	10772131.78	0.0074	0.0049
Mercury	24781-03-27 05:16 G	10772219.56	10772219.72	10772219.91	0.0074	0.0032
Mercury	24781-06-23 08:09 G	10772307.65	10772307.84	10772308.04	0.0073	0.0015
Mercury	24781-09-19 10:48 G	10772395.75	10772395.95	10772396.15	0.0073	0.0002
Mercury	24781-12-16 12:57 G	10772483.86	10772484.04	10772484.24	0.0073	0.0019
Mercury	24782-03-14 15:36 G	10772571.98	10772572.15	10772572.33	0.0073	0.0035
Mercury	24782-06-10 17:45 G	10772660.12	10772660.24	10772660.40	0.0073	0.0051
Mercury	24782-09-06 20:09 G	10772748.29	10772748.34	10772748.44	0.0073	0.0067
Mars	24926-08-31 05:16 G	10825336.62	10825336.72	10825336.87	0.0063	0.0056
Moon	24929-11-21 12:43 G	10826514.78	10826515.03	10826515.29	0.0064	0.0015
Earth	24929-11-21 15:50 G	10826514.92	10826515.16	10826515.43	0.0064	0.0013 *
Venus	24934-11-28 02:24 G	10828347.43	10828347.60	10828347.81	0.0066	0.0032
Venus	24935-07-11 07:26 G	10828572.59	10828572.81	10828573.02	0.0066	0.0015
Venus	24936-02-21 11:16 G	10828797.93	10828797.97	10828798.08	0.0067	0.0063



Mercury	24943-03-14 15:50 G	10831376.11	10831376.16	10831376.21	0.0070	0.0064
Mercury	24943-06-10 16:19 G	10831464.11	10831464.18	10831464.27	0.0070	0.0055
Mercury	24943-09-06 17:02 G	10831552.11	10831552.21	10831552.31	0.0070	0.0045
Mercury	24943-12-03 17:31 G	10831640.12	10831640.23	10831640.35	0.0070	0.0036
Mercury	24944-02-29 18:14 G	10831728.14	10831728.26	10831728.38	0.0070	0.0026
Mercury	24944-05-27 18:43 G	10831816.16	10831816.28	10831816.41	0.0070	0.0017
Mercury	24944-08-23 19:26 G	10831904.18	10831904.31	10831904.44	0.0070	0.0007
Mercury	24944-11-19 19:55 G	10831992.20	10831992.33	10831992.46	0.0070	0.0003
Mercury	24945-02-15 20:24 G	10832080.23	10832080.35	10832080.49	0.0071	0.0013
Mercury	24945-05-14 21:07 G	10832168.26	10832168.38	10832168.51	0.0071	0.0022
Mercury	24945-08-10 21:36 G	10832256.29	10832256.40	10832256.52	0.0071	0.0032
Mercury	24945-11-06 22:19 G	10832344.33	10832344.43	10832344.54	0.0071	0.0042
Mercury	24946-02-02 22:48 G	10832432.37	10832432.45	10832432.55	0.0071	0.0052
Mercury	24946-05-01 23:16 G	10832520.42	10832520.47	10832520.55	0.0071	0.0063

# 26TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 26th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Earth	25018-05-23 12:57 G	10858838.80	10858839.04	10858839.29	0.0080	0.0028		
Moon	25018-05-23 15:07 G	10858838.90	10858839.13	10858839.37	0.0080	0.0031	*	
Venus	25021-12-17 09:21 G	10860142.75	10860142.89	10860143.08	0.0078	0.0053		
Venus	25022-07-30 19:12 G	10860368.09	10860368.30	10860368.51	0.0077	0.0024		

Mercury	25029-04-24 05:31 G	10862827.65	10862827.73	10862827.86	0.0074	0.0062
Mercury	25029-07-21 08:24 G	10862915.71	10862915.85	10862916.02	0.0074	0.0045
Mercury	25029-10-17 11:02 G	10863003.78	10863003.96	10863004.15	0.0073	0.0028
Mercury	25030-01-13 13:40 G	10863091.88	10863092.07	10863092.27	0.0073	0.0011
Mercury	25030-04-11 16:19 G	10863179.98	10863180.18	10863180.38	0.0073	0.0006
Mercury	25030-07-08 18:43 G	10863268.10	10863268.28	10863268.47	0.0073	0.0022
Mercury	25030-10-04 21:07 G	10863356.22	10863356.38	10863356.56	0.0073	0.0038
Mercury	25030-12-31 23:16 G	10863444.36	10863444.47	10863444.62	0.0073	0.0055
Mercury	25031-03-30 01:40 G	10863532.55	10863532.57	10863532.64	0.0073	0.0071
Earth	25177-11-24 11:16 G	10917097.78	10917097.97	10917098.19	0.0064	0.0039
Moon	25177-11-24 15:07 G	10917097.93	10917098.13	10917098.35	0.0064	0.0038 *
Moon	25178-11-25 21:07 G	10917464.22	10917464.38	10917464.60	0.0064	0.0044
Earth	25178-11-26 00:00 G	10917464.31	10917464.50	10917464.69	0.0064	0.0043 *
Venus	25183-06-15 04:04 G	10919126.49	10919126.67	10919126.89	0.0066	0.0028
Venus	25184-01-26 08:52 G	10919351.67	10919351.87	10919352.09	0.0066	0.0019
Venus	25184-09-07 13:55 G	10919577.08	10919577.08	10919577.09	0.0067	0.0066
Mercury	25191-10-04 22:48 G	10922160.41	10922160.45	10922160.51	0.0070	0.0064
Mercury	25191-12-31 23:16 G	10922248.40	10922248.47	10922248.56	0.0070	0.0055
Mercury	25192-03-29 00:00 G	10922336.41	10922336.50	10922336.61	0.0070	0.0045
Mercury	25192-06-25 00:28 G	10922424.42	10922424.52	10922424.64	0.0070	0.0036
Mercury	25192-09-21 01:12 G	10922512.43	10922512.55	10922512.68	0.0070	0.0026
Mercury	25192-12-18 01:55 G	10922600.45	10922600.58	10922600.71	0.0070	0.0016
Mercury	25193-03-16 02:24 G	10922688.47	10922688.60	10922688.73	0.0070	0.0007
Mercury	25193-06-12 03:07 G	10922776.50	10922776.63	10922776.76	0.0070	0.0003
Mercury	25193-09-08 03:36 G	10922864.52	10922864.65	10922864.78	0.0071	0.0013
Mercury	25193-12-05 04:04 G	10922952.55	10922952.67	10922952.80	0.0071	0.0023
Mercury	25194-03-03 04:33 G	10923040.59	10923040.69	10923040.82	0.0071	0.0033
Mercury	25194-05-30 05:31 G	10923128.62	10923128.73	10923128.83	0.0071	0.0042
Mercury	25194-08-26 06:00 G	10923216.67	10923216.75	10923216.84	0.0071	0.0052
Mercury	25194-11-22 06:43 G	10923304.72	10923304.78	10923304.84	0.0071	0.0063

Earth	25267-05-27 03:36 G	10949788.43	10949788.65	10949788.91	0.0079	0.0031
Moon	25267-05-27 07:26 G	10949788.57	10949788.81	10949789.05	0.0079	0.0027 *
Venus	25270-07-03 10:48 G	10950921.80	10950921.95	10950922.13	0.0078	0.0051
Venus	25271-02-13 20:09 G	10951147.15	10951147.34	10951147.56	0.0077	0.0026
Mercury	25277-11-13 10:33 G	10953611.84	10953611.94	10953612.06	0.0074	0.0062
Mercury	25278-02-09 13:12 G	10953699.90	10953700.05	10953700.21	0.0074	0.0045
Mercury	25278-05-08 15:50 G	10953787.98	10953788.16	10953788.35	0.0074	0.0028
Mercury	25278-08-04 18:14 G	10953876.07	10953876.26	10953876.47	0.0073	0.0012
Mercury	25278-10-31 20:52 G	10953964.18	10953964.37	10953964.57	0.0073	0.0006
Mercury	25279-01-27 23:16 G	10954052.29	10954052.47	10954052.67	0.0073	0.0022
Mercury	25279-04-26 01:55 G	10954140.42	10954140.58	10954140.75	0.0073	0.0038
Mercury	25279-07-23 04:04 G	10954228.56	10954228.67	10954228.82	0.0073	0.0055
Mercury	25279-10-19 06:28 G	10954316.75	10954316.77	10954316.83	0.0073	0.0071
Earth	25426-11-28 22:33 G	11008047.18	11008047.44	11008047.70	0.0064	0.0002
Moon	25426-11-28 23:45 G	11008047.22	11008047.49	11008047.76	0.0064	0.0001 *
Venus	25431-05-20 03:21 G	11009680.59	11009680.64	11009680.71	0.0066	0.0063
Venus	25431-12-31 07:55 G	11009905.63	11009905.83	11009906.05	0.0066	0.0017
Venus	25432-08-12 12:28 G	11010130.84	11010131.02	11010131.23	0.0066	0.0030
Mercury	25440-01-29 06:00 G	11012856.74	11012856.75	11012856.77	0.0070	0.0069
Mercury	25440-04-26 06:14 G	11012944.71	11012944.76	11012944.84	0.0070	0.0060
Mercury	25440-07-23 07:12 G	11013032.71	11013032.80	11013032.89	0.0070	0.0050
Mercury	25440-10-19 07:26 G	11013120.72	11013120.81	11013120.93	0.0070	0.0041
Mercury	25441-01-15 08:24 G	11013208.73	11013208.85	11013208.96	0.0070	0.0031
Mercury	25441-04-13 08:38 G	11013296.75	11013296.86	11013296.99	0.0070	0.0023
Mercury	25441-07-10 09:21 G	11013384.77	11013384.89	11013385.02	0.0070	0.0012
Mercury	25441-10-06 10:04 G	11013472.79	11013472.92	11013473.05	0.0070	0.0003
Mercury	25442-01-02 10:33 G	11013560.81	11013560.94	11013561.07	0.0070	0.0008
Mercury	25442-03-31 11:16 G	11013648.84	11013648.97	11013649.10	0.0071	0.0017
Mercury	25442-06-27 11:45 G	11013736.87	11013736.99	11013737.12	0.0071	0.0027
Mercury	25442-09-23 12:14 G	11013824.91	11013825.01	11013825.13	0.0071	0.0037

Mercury	25442-12-20 12:57 G	11013912.95	11013913.04	11013913.14	0.0071	0.0047
Mercury	25443-03-18 13:26 G	11014001.00	11014001.06	11014001.15	0.0071	0.0057
Mercury	25443-06-14 14:09 G	11014089.06	11014089.09	11014089.14	0.0071	0.0067
Moon	25515-05-30 16:04 G	11040371.01	11040371.17	11040371.38	0.0080	0.0055
Earth	25515-05-30 19:12 G	11040371.12	11040371.30	11040371.51	0.0080	0.0052 *
Venus	25519-01-19 14:24 G	11041700.92	11041701.10	11041701.32	0.0078	0.0037
Venus	25519-09-02 00:00 G	11041926.32	11041926.50	11041926.70	0.0077	0.0040
Mercury	25526-03-10 13:40 G	11044308.06	11044308.07	11044308.13	0.0074	0.0073
Mercury	25526-06-06 16:19 G	11044396.07	11044396.18	11044396.33	0.0074	0.0056
Mercury	25526-09-02 19:12 G	11044484.14	11044484.30	11044484.48	0.0074	0.0039
Mercury	25526-11-29 21:50 G	11044572.23	11044572.41	11044572.61	0.0073	0.0022
Mercury	25527-02-26 00:28 G	11044660.32	11044660.52	11044660.72	0.0073	0.0005
Mercury	25527-05-25 02:52 G	11044748.43	11044748.62	11044748.82	0.0073	0.0012
Mercury	25527-08-21 05:31 G	11044836.55	11044836.73	11044836.92	0.0073	0.0028
Mercury	25527-11-17 07:40 G	11044924.68	11044924.82	11044924.99	0.0073	0.0045
Mercury	25528-02-13 10:19 G	11045012.83	11045012.93	11045013.05	0.0073	0.0061
Earth	25674-11-30 18:28 G	11098630.14	11098630.27	11098630.46	0.0064	0.0051
Moon	25674-11-30 19:55 G	11098630.20	11098630.33	11098630.50	0.0064	0.0051 *
Moon	25675-12-02 04:19 G	11098996.47	11098996.68	11098996.93	0.0064	0.0032
Earth	25675-12-02 06:57 G	11098996.58	11098996.79	11098997.04	0.0064	0.0031 *
Venus	25679-12-04 05:45 G	11100459.64	11100459.74	11100459.86	0.0066	0.0056
Venus	25680-07-16 10:19 G	11100684.72	11100684.93	11100685.16	0.0066	0.0010
Venus	25681-02-26 14:38 G	11100909.95	11100910.11	11100910.31	0.0066	0.0038
Mercury	25688-08-19 13:12 G	11103641.02	11103641.05	11103641.09	0.0070	0.0067
Mercury	25688-11-15 13:40 G	11103729.01	11103729.07	11103729.15	0.0070	0.0058
Mercury	25689-02-11 14:09 G	11103817.01	11103817.09	11103817.20	0.0070	0.0049
Mercury	25689-05-10 14:52 G	11103905.02	11103905.12	11103905.23	0.0070	0.0039
Mercury	25689-08-06 15:36 G	11103993.03	11103993.15	11103993.27	0.0070	0.0029
Mercury	25689-11-02 16:04 G	11104081.05	11104081.17	11104081.30	0.0070	0.0020
Mercury	25690-01-29 16:48 G	11104169.07	11104169.20	11104169.33	0.0070	0.0010

Mercury	25690-04-27 17:16 G	11104257.09	11104257.22	11104257.35	0.0070	0.0002
Mercury	25690-07-24 18:00 G	11104345.12	11104345.25	11104345.38	0.0070	0.0009
Mercury	25690-10-20 18:28 G	11104433.15	11104433.27	11104433.40	0.0071	0.0019
Mercury	25691-01-16 19:12 G	11104521.18	11104521.30	11104521.42	0.0071	0.0029
Mercury	25691-04-14 19:40 G	11104609.22	11104609.32	11104609.43	0.0071	0.0039
Mercury	25691-07-11 20:09 G	11104697.26	11104697.34	11104697.44	0.0071	0.0049
Mercury	25691-10-07 20:52 G	11104785.31	11104785.37	11104785.45	0.0071	0.0059
Mercury	25692-01-03 21:21 G	11104873.38	11104873.39	11104873.43	0.0071	0.0070
Earth	25764-06-02 12:28 G	11131320.78	11131321.02	11131321.29	0.0079	0.0015
Moon	25764-06-02 13:12 G	11131320.81	11131321.05	11131321.30	0.0079	0.0011 *
Venus	25767-08-05 17:31 G	11132480.02	11132480.23	11132480.44	0.0078	0.0028
Venus	25768-03-18 02:24 G	11132705.45	11132705.60	11132705.79	0.0077	0.0049
Mercury	25774-09-29 19:26 G	11135092.26	11135092.31	11135092.39	0.0074	0.0069
Mercury	25774-12-26 22:04 G	11135180.29	11135180.42	11135180.57	0.0074	0.0052
Mercury	25775-03-25 00:43 G	11135268.36	11135268.53	11135268.71	0.0074	0.0035
Mercury	25775-06-21 03:07 G	11135356.45	11135356.63	11135356.84	0.0073	0.0019
Mercury	25775-09-17 06:00 G	11135444.55	11135444.75	11135444.95	0.0073	0.0001
Mercury	25775-12-14 08:24 G	11135532.66	11135532.85	11135533.05	0.0073	0.0016
Mercury	25776-03-11 10:48 G	11135620.78	11135620.95	11135621.14	0.0073	0.0032
Mercury	25776-06-07 13:26 G	11135708.92	11135709.06	11135709.21	0.0073	0.0048
Mercury	25776-09-03 15:36 G	11135797.08	11135797.15	11135797.26	0.0073	0.0065
Earth	25923-12-06 06:43 G	11189579.53	11189579.78	11189580.05	0.0064	0.0011
Moon	25923-12-06 10:19 G	11189579.68	11189579.93	11189580.19	0.0064	0.0008 *
Venus	25928-06-21 10:05 G	11191238.76	11191238.92	11191239.10	0.0066	0.0042
Venus	25929-02-01 14:53 G	11191463.90	11191464.12	11191464.34	0.0066	0.0004
Venus	25929-09-14 19:12 G	11191689.18	11191689.30	11191689.46	0.0066	0.0052
Mercury	25937-03-12 20:53 G	11194425.32	11194425.37	11194425.44	0.0070	0.0062
Mercury	25937-06-08 21:36 G	11194513.32	11194513.40	11194513.49	0.0070	0.0052
Mercury	25937-09-04 22:05 G	11194601.33	11194601.42	11194601.53	0.0070	0.0043
Mercury	25937-12-01 22:48 G	11194689.34	11194689.45	11194689.57	0.0070	0.0033

Mercury	25938-02-27 23:17 G	11194777.35	11194777.47	11194777.60	0.0070	0.0024
Mercury	25938-05-27 00:00 G	11194865.37	11194865.50	11194865.63	0.0070	0.0014
Mercury	25938-08-23 00:29 G	11194953.39	11194953.52	11194953.66	0.0070	0.0005
Mercury	25938-11-19 01:12 G	11195041.42	11195041.55	11195041.68	0.0070	0.0006
Mercury	25939-02-15 01:41 G	11195129.45	11195129.57	11195129.70	0.0071	0.0015
Mercury	25939-05-14 02:09 G	11195217.48	11195217.59	11195217.72	0.0071	0.0026
Mercury	25939-08-10 02:53 G	11195305.51	11195305.62	11195305.74	0.0071	0.0035
Mercury	25939-11-06 03:36 G	11195393.55	11195393.65	11195393.75	0.0071	0.0045
Mercury	25940-02-02 04:05 G	11195481.60	11195481.67	11195481.76	0.0071	0.0055
Mercury	25940-04-30 04:48 G	11195569.65	11195569.70	11195569.75	0.0071	0.0065

# 27TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 27th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Moon	26012-06-05 03:07 G		11221903.49	11221903.63	11221903.82	0.0080	0.0063	
Earth	26012-06-05 05:31 G		11221903.60	11221903.73	11221903.93	0.0080	0.0062	*
Venus	26016-02-20 22:33 G		11223259.22	11223259.44	11223259.66	0.0078	0.0008	
Venus	26016-10-03 07:12 G		11223484.72	11223484.80	11223484.93	0.0077	0.0068	
Mercury	26023-04-22 01:55 G		11225876.48	11225876.58	11225876.72	0.0074	0.0060	
Mercury	26023-07-19 04:33 G		11225964.55	11225964.69	11225964.87	0.0074	0.0043	
Mercury	26023-10-15 07:12 G		11226052.63	11226052.80	11226053.00	0.0074	0.0026	
Mercury	26024-01-11 10:05 G		11226140.72	11226140.92	11226141.12	0.0073	0.0008	

Mercury	26024-04-08 12:29 G	11226228.83	11226229.02	11226229.22	0.0073	0.0009
Mercury	26024-07-05 14:53 G	11226316.94	11226317.12	11226317.32	0.0073	0.0025
Mercury	26024-10-01 17:31 G	11226405.07	11226405.23	11226405.40	0.0073	0.0041
Mercury	26024-12-28 19:41 G	11226493.22	11226493.32	11226493.46	0.0073	0.0058
Moon	26171-12-08 00:57 G	11280162.47	11280162.54	11280162.68	0.0064	0.0058
Earth	26171-12-08 04:33 G	11280162.59	11280162.69	11280162.84	0.0064	0.0056 *
Earth	26172-12-08 16:48 G	11280528.97	11280529.20	11280529.45	0.0064	0.0026
Moon	26172-12-08 19:26 G	11280529.08	11280529.31	11280529.57	0.0064	0.0027 *
Venus	26177-01-05 13:12 G	11282017.87	11282018.05	11282018.26	0.0066	0.0032
Venus	26177-08-18 17:45 G	11282243.04	11282243.24	11282243.47	0.0066	0.0015
Venus	26178-03-31 22:05 G	11282468.37	11282468.42	11282468.53	0.0066	0.0063
Mercury	26185-07-06 03:50 G	11285121.64	11285121.66	11285121.70	0.0070	0.0068
Mercury	26185-10-02 04:33 G	11285209.63	11285209.69	11285209.77	0.0070	0.0058
Mercury	26185-12-29 05:02 G	11285297.63	11285297.71	11285297.81	0.0070	0.0049
Mercury	26186-03-27 05:45 G	11285385.63	11285385.74	11285385.85	0.0070	0.0039
Mercury	26186-06-23 06:14 G	11285473.65	11285473.76	11285473.88	0.0070	0.0030
Mercury	26186-09-19 06:43 G	11285561.66	11285561.78	11285561.91	0.0070	0.0021
Mercury	26186-12-16 07:26 G	11285649.68	11285649.81	11285649.94	0.0070	0.0010
Mercury	26187-03-14 08:09 G	11285737.71	11285737.84	11285737.97	0.0070	0.0001
Mercury	26187-06-10 08:38 G	11285825.73	11285825.86	11285825.99	0.0070	0.0009
Mercury	26187-09-06 09:07 G	11285913.76	11285913.88	11285914.01	0.0071	0.0019
Mercury	26187-12-03 09:50 G	11286001.79	11286001.91	11286002.03	0.0071	0.0029
Mercury	26188-02-29 10:19 G	11286089.83	11286089.93	11286090.05	0.0071	0.0039
Mercury	26188-05-27 11:02 G	11286177.87	11286177.96	11286178.06	0.0071	0.0049
Mercury	26188-08-23 11:31 G	11286265.92	11286265.98	11286266.06	0.0071	0.0059
Mercury	26188-11-19 12:14 G	11286353.99	11286354.01	11286354.04	0.0071	0.0069
Mars	26259-05-01 11:02 G	11312082.81	11312082.96	11312083.19	0.0081	0.0068
Moon	26261-06-09 22:19 G	11312853.18	11312853.43	11312853.69	0.0079	0.0009
Earth	26261-06-10 01:55 G	11312853.33	11312853.58	11312853.84	0.0079	0.0013 *
Venus	26264-01-25 16:48 G	11313813.12	11313813.20	11313813.30	0.0078	0.0070

Venus	26264-09-07 02:09 G	11314038.38	11314038.59	11314038.82	0.0078	0.0008
Mercury	26271-08-16 05:31 G	11316572.69	11316572.73	11316572.82	0.0074	0.0070
Mercury	26271-11-12 08:38 G	11316660.72	11316660.86	11316661.00	0.0074	0.0052
Mercury	26272-02-08 11:02 G	11316748.79	11316748.96	11316749.14	0.0074	0.0035
Mercury	26272-05-06 13:26 G	11316836.88	11316837.06	11316837.27	0.0074	0.0019
Mercury	26272-08-02 16:19 G	11316924.98	11316925.18	11316925.38	0.0073	0.0001
Mercury	26272-10-29 18:57 G	11317013.09	11317013.29	11317013.48	0.0073	0.0016
Mercury	26273-01-25 21:07 G	11317101.21	11317101.38	11317101.57	0.0073	0.0033
Mercury	26273-04-23 23:31 G	11317189.35	11317189.48	11317189.64	0.0073	0.0049
Mercury	26273-07-21 02:09 G	11317277.51	11317277.59	11317277.68	0.0073	0.0065
Moon	26420-12-11 16:48 G	11371111.96	11371112.20	11371112.46	0.0064	0.0010
Earth	26420-12-11 17:31 G	11371111.99	11371112.23	11371112.50	0.0064	0.0014 *
Venus	26424-12-10 13:41 G	11372572.01	11372572.07	11372572.17	0.0066	0.0061
Venus	26425-07-23 18:14 G	11372797.06	11372797.26	11372797.49	0.0066	0.0015
Venus	26426-03-05 23:02 G	11373022.28	11373022.46	11373022.66	0.0066	0.0032
Mercury	26433-10-30 11:31 G	11375817.98	11375817.98	11375817.99	0.0070	0.0069
Mercury	26434-01-26 12:00 G	11375905.95	11375906.00	11375906.07	0.0070	0.0060
Mercury	26434-04-24 12:29 G	11375993.94	11375994.02	11375994.12	0.0070	0.0051
Mercury	26434-07-21 13:12 G	11376081.95	11376082.05	11376082.16	0.0070	0.0041
Mercury	26434-10-17 13:41 G	11376169.96	11376170.07	11376170.20	0.0070	0.0032
Mercury	26435-01-13 14:24 G	11376257.98	11376258.10	11376258.23	0.0070	0.0022
Mercury	26435-04-11 15:07 G	11376346.00	11376346.13	11376346.26	0.0070	0.0012
Mercury	26435-07-08 15:36 G	11376434.02	11376434.15	11376434.28	0.0070	0.0003
Mercury	26435-10-04 16:05 G	11376522.04	11376522.17	11376522.30	0.0070	0.0008
Mercury	26435-12-31 16:33 G	11376610.07	11376610.19	11376610.33	0.0071	0.0018
Mercury	26436-03-28 17:17 G	11376698.10	11376698.22	11376698.34	0.0071	0.0027
Mercury	26436-06-24 18:00 G	11376786.14	11376786.25	11376786.36	0.0071	0.0037
Mercury	26436-09-20 18:29 G	11376874.18	11376874.27	11376874.37	0.0071	0.0047
Mercury	26436-12-17 18:57 G	11376962.22	11376962.29	11376962.38	0.0071	0.0057
Mercury	26437-03-15 19:41 G	11377050.29	11377050.32	11377050.36	0.0071	0.0067



Mars	26507-08-09 19:12 G	11402763.05	11402763.30	11402763.62	0.0081	0.0047
Earth	26509-06-12 21:07 G	11403436.21	11403436.38	11403436.57	0.0080	0.0056
Moon	26509-06-12 23:17 G	11403436.32	11403436.47	11403436.69	0.0080	0.0057 *
Venus	26512-08-11 23:17 G	11404592.29	11404592.47	11404592.65	0.0078	0.0044
Venus	26513-03-25 08:24 G	11404817.66	11404817.85	11404818.06	0.0078	0.0033
Mercury	26520-03-07 12:57 G	11407356.93	11407357.04	11407357.18	0.0074	0.0057
Mercury	26520-06-03 15:21 G	11407444.99	11407445.14	11407445.33	0.0074	0.0040
Mercury	26520-08-30 18:14 G	11407533.08	11407533.26	11407533.46	0.0074	0.0022
Mercury	26520-11-26 20:53 G	11407621.18	11407621.37	11407621.57	0.0073	0.0006
Mercury	26521-02-22 23:31 G	11407709.28	11407709.48	11407709.68	0.0073	0.0012
Mercury	26521-05-22 01:55 G	11407797.40	11407797.58	11407797.77	0.0073	0.0028
Mercury	26521-08-18 04:05 G	11407885.53	11407885.67	11407885.85	0.0073	0.0045
Mercury	26521-11-14 06:57 G	11407973.69	11407973.79	11407973.90	0.0073	0.0061
Moon	26668-12-14 16:19 G	11461695.08	11461695.18	11461695.36	0.0064	0.0055
Earth	26668-12-14 17:31 G	11461695.11	11461695.23	11461695.39	0.0064	0.0054 *
Earth	26669-12-16 05:45 G	11462061.52	11462061.74	11462061.99	0.0064	0.0029
Moon	26669-12-16 07:55 G	11462061.62	11462061.83	11462062.07	0.0064	0.0031 *
Venus	26673-06-27 18:14 G	11463351.12	11463351.26	11463351.43	0.0066	0.0046
Venus	26674-02-07 23:02 G	11463576.24	11463576.46	11463576.68	0.0066	0.0001
Venus	26674-09-21 03:50 G	11463801.51	11463801.66	11463801.81	0.0066	0.0048
Mercury	26682-05-22 19:12 G	11466602.26	11466602.30	11466602.36	0.0070	0.0064
Mercury	26682-08-18 19:55 G	11466690.25	11466690.33	11466690.42	0.0070	0.0054
Mercury	26682-11-14 20:24 G	11466778.26	11466778.35	11466778.46	0.0070	0.0045
Mercury	26683-02-10 21:07 G	11466866.27	11466866.38	11466866.50	0.0070	0.0035
Mercury	26683-05-09 21:36 G	11466954.28	11466954.40	11466954.53	0.0070	0.0026
Mercury	26683-08-05 22:05 G	11467042.30	11467042.42	11467042.56	0.0070	0.0017
Mercury	26683-11-01 22:48 G	11467130.32	11467130.45	11467130.58	0.0070	0.0006
Mercury	26684-01-28 23:31 G	11467218.35	11467218.48	11467218.61	0.0070	0.0004
Mercury	26684-04-26 00:00 G	11467306.37	11467306.50	11467306.63	0.0070	0.0014
Mercury	26684-07-23 00:29 G	11467394.40	11467394.52	11467394.65	0.0071	0.0024

Mercury	26684-10-19 00:57 G	11467482.44	11467482.54	11467482.67	0.0071	0.0034
Mercury	26685-01-15 01:26 G	11467570.47	11467570.56	11467570.68	0.0071	0.0044
Mercury	26685-04-13 02:09 G	11467658.52	11467658.59	11467658.69	0.0071	0.0054
Mercury	26685-07-10 02:38 G	11467746.57	11467746.61	11467746.68	0.0071	0.0064
Mars	26755-11-17 23:31 G	11493443.16	11493443.48	11493443.84	0.0081	0.0019
Moon	26758-06-17 19:26 G	11494386.07	11494386.31	11494386.58	0.0079	0.0024
Earth	26758-06-17 19:26 G	11494386.09	11494386.31	11494386.57	0.0079	0.0029 *
Venus	26761-02-27 04:33 G	11495371.49	11495371.69	11495371.92	0.0078	0.0021
Venus	26761-10-10 13:55 G	11495596.95	11495597.08	11495597.25	0.0078	0.0057
Mercury	26768-07-01 17:31 G	11498053.14	11498053.23	11498053.35	0.0074	0.0062
Mercury	26768-09-27 19:55 G	11498141.19	11498141.33	11498141.51	0.0074	0.0045
Mercury	26768-12-24 22:33 G	11498229.27	11498229.44	11498229.64	0.0074	0.0028
Mercury	26769-03-23 01:26 G	11498317.37	11498317.56	11498317.76	0.0074	0.0010
Mercury	26769-06-19 04:05 G	11498405.47	11498405.67	11498405.87	0.0073	0.0007
Mercury	26769-09-15 06:43 G	11498493.59	11498493.78	11498493.97	0.0073	0.0024
Mercury	26769-12-12 09:07 G	11498581.72	11498581.88	11498582.05	0.0073	0.0040
Mercury	26770-03-10 11:17 G	11498669.86	11498669.97	11498670.11	0.0073	0.0057
Moon	26917-12-19 05:31 G	11552644.47	11552644.73	11552644.99	0.0064	0.0002
Earth	26917-12-19 09:07 G	11552644.62	11552644.88	11552645.14	0.0064	0.0004 *
Venus	26922-01-13 00:43 G	11554130.34	11554130.53	11554130.76	0.0066	0.0023
Venus	26922-08-26 05:31 G	11554355.53	11554355.73	11554355.94	0.0066	0.0024
Mercury	26930-09-16 03:07 G	11557298.59	11557298.63	11557298.70	0.0070	0.0063
Mercury	26930-12-13 03:50 G	11557386.58	11557386.66	11557386.75	0.0070	0.0053
Mercury	26931-03-11 04:19 G	11557474.59	11557474.68	11557474.79	0.0070	0.0044
Mercury	26931-06-07 05:02 G	11557562.60	11557562.71	11557562.83	0.0070	0.0034
Mercury	26931-09-03 05:45 G	11557650.61	11557650.74	11557650.86	0.0070	0.0025
Mercury	26931-11-30 06:14 G	11557738.63	11557738.76	11557738.89	0.0070	0.0015
Mercury	26932-02-26 06:43 G	11557826.65	11557826.78	11557826.91	0.0070	0.0005
Mercury	26932-05-24 07:26 G	11557914.68	11557914.81	11557914.94	0.0070	0.0005
Mercury	26932-08-20 07:55 G	11558002.70	11558002.83	11558002.96	0.0070	0.0015

Mercury	26932-11-16 08:24 G	11558090.73	11558090.85	11558090.98	0.0071	0.0025
Mercury	26933-02-12 08:53 G	11558178.77	11558178.87	11558178.99	0.0071	0.0035
Mercury	26933-05-11 09:36 G	11558266.81	11558266.90	11558267.01	0.0071	0.0045
Mercury	26933-08-07 10:05 G	11558354.85	11558354.92	11558355.01	0.0071	0.0055
Mercury	26933-11-03 10:33 G	11558442.91	11558442.94	11558443.01	0.0071	0.0066

# 28TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 28th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mars	27004-02-26 13:55 G		11584123.76	11584124.08	11584124.43	0.0081	0.0019	
Earth	27006-06-20 18:29 G		11584969.05	11584969.27	11584969.52	0.0080	0.0030	
Moon	27006-06-20 20:38 G		11584969.14	11584969.36	11584969.61	0.0080	0.0029	*
Venus	27009-02-01 03:36 G		11585925.53	11585925.65	11585925.79	0.0078	0.0063	
Venus	27009-09-14 12:57 G		11586150.83	11586151.04	11586151.27	0.0078	0.0015	
Mercury	27016-10-25 23:17 G		11588749.37	11588749.47	11588749.59	0.0074	0.0061	
Mercury	27017-01-22 01:41 G		11588837.43	11588837.57	11588837.75	0.0074	0.0044	
Mercury	27017-04-20 04:19 G		11588925.51	11588925.68	11588925.88	0.0074	0.0027	
Mercury	27017-07-17 06:57 G		11589013.60	11589013.79	11589014.00	0.0074	0.0010	
Mercury	27017-10-13 09:50 G		11589101.71	11589101.91	11589102.10	0.0073	0.0008	
Mercury	27018-01-09 12:14 G		11589189.82	11589190.01	11589190.20	0.0073	0.0025	
Mercury	27018-04-07 14:38 G		11589277.95	11589278.11	11589278.28	0.0073	0.0042	
Mercury	27018-07-04 17:02 G		11589366.10	11589366.21	11589366.34	0.0073	0.0058	

Earth	27165-12-22 12:14 G	11643227.80	11643228.01	11643228.23	0.0064	0.0036
Moon	27165-12-22 15:21 G	11643227.95	11643228.14	11643228.37	0.0064	0.0038 *
Moon	27166-12-23 21:50 G	11643594.25	11643594.41	11643594.57	0.0065	0.0049
Earth	27166-12-24 00:14 G	11643594.35	11643594.51	11643594.71	0.0065	0.0047 *
Venus	27169-12-18 02:38 G	11644684.48	11644684.61	11644684.80	0.0066	0.0046
Venus	27170-07-31 07:41 G	11644909.60	11644909.82	11644910.04	0.0066	0.0001
Venus	27171-03-13 11:45 G	11645134.86	11645134.99	11645135.16	0.0066	0.0048
Mercury	27179-01-10 11:02 G	11647994.91	11647994.96	11647995.03	0.0070	0.0062
Mercury	27179-04-08 11:31 G	11648082.91	11648082.98	11648083.08	0.0070	0.0053
Mercury	27179-07-05 12:14 G	11648170.91	11648171.01	11648171.12	0.0070	0.0043
Mercury	27179-10-01 12:57 G	11648258.93	11648259.04	11648259.15	0.0070	0.0033
Mercury	27179-12-28 13:26 G	11648346.94	11648347.06	11648347.19	0.0070	0.0024
Mercury	27180-03-25 13:55 G	11648434.96	11648435.08	11648435.22	0.0070	0.0014
Mercury	27180-06-21 14:38 G	11648522.98	11648523.11	11648523.24	0.0070	0.0004
Mercury	27180-09-17 15:07 G	11648611.01	11648611.13	11648611.27	0.0070	0.0006
Mercury	27180-12-14 15:50 G	11648699.03	11648699.16	11648699.29	0.0071	0.0016
Mercury	27181-03-12 16:19 G	11648787.06	11648787.18	11648787.31	0.0071	0.0026
Mercury	27181-06-08 16:48 G	11648875.10	11648875.20	11648875.32	0.0071	0.0036
Mercury	27181-09-04 17:17 G	11648963.13	11648963.22	11648963.33	0.0071	0.0046
Mercury	27181-12-01 18:00 G	11649051.18	11649051.25	11649051.34	0.0071	0.0056
Mercury	27182-02-27 18:29 G	11649139.24	11649139.27	11649139.33	0.0071	0.0066
Mars	27252-06-05 04:48 G	11674804.38	11674804.70	11674805.04	0.0081	0.0026
Moon	27254-06-22 15:07 G	11675552.13	11675552.13	11675552.15	0.0080	0.0080
Earth	27255-06-24 21:36 G	11675919.32	11675919.40	11675919.54	0.0079	0.0072
Moon	27255-06-25 01:26 G	11675919.45	11675919.56	11675919.72	0.0079	0.0067 *
Venus	27257-08-18 12:14 G	11676704.81	11676705.01	11676705.23	0.0078	0.0025
Venus	27258-03-31 21:36 G	11676930.25	11676930.40	11676930.58	0.0078	0.0053
Mercury	27265-02-18 05:17 G	11679445.61	11679445.72	11679445.85	0.0074	0.0058
Mercury	27265-05-17 07:41 G	11679533.67	11679533.82	11679534.00	0.0074	0.0041
Mercury	27265-08-13 10:19 G	11679621.76	11679621.93	11679622.14	0.0074	0.0024

Mercury	27265-11-09 13:12 G	11679709.85	11679710.05	11679710.25	0.0074	0.0006
Mercury	27266-02-05 15:36 G	11679797.96	11679798.15	11679798.36	0.0073	0.0012
Mercury	27266-05-04 18:00 G	11679886.08	11679886.25	11679886.45	0.0073	0.0029
Mercury	27266-07-31 20:24 G	11679974.22	11679974.35	11679974.53	0.0073	0.0045
Mercury	27266-10-27 23:17 G	11680062.37	11680062.47	11680062.58	0.0073	0.0061
Moon	27413-12-25 15:21 G	11733811.09	11733811.14	11733811.27	0.0064	0.0061
Earth	27413-12-25 18:43 G	11733811.19	11733811.28	11733811.42	0.0064	0.0057 *
Earth	27414-12-27 07:12 G	11734177.57	11734177.80	11734178.05	0.0065	0.0025
Moon	27414-12-27 08:38 G	11734177.63	11734177.86	11734178.12	0.0065	0.0027 *
Venus	27417-11-22 07:12 G	11735238.73	11735238.80	11735238.92	0.0066	0.0059
Venus	27418-07-05 12:14 G	11735463.79	11735464.01	11735464.23	0.0066	0.0012
Venus	27419-02-15 16:33 G	11735689.01	11735689.19	11735689.38	0.0066	0.0034
Mercury	27427-02-07 18:57 G	11738603.26	11738603.29	11738603.35	0.0070	0.0066
Mercury	27427-05-06 19:41 G	11738691.25	11738691.32	11738691.40	0.0070	0.0056
Mercury	27427-08-02 20:09 G	11738779.26	11738779.34	11738779.45	0.0070	0.0047
Mercury	27427-10-29 20:53 G	11738867.26	11738867.37	11738867.49	0.0070	0.0037
Mercury	27428-01-25 21:21 G	11738955.28	11738955.39	11738955.52	0.0070	0.0027
Mercury	27428-04-22 22:05 G	11739043.30	11739043.42	11739043.55	0.0070	0.0017
Mercury	27428-07-19 22:33 G	11739131.32	11739131.44	11739131.58	0.0070	0.0008
Mercury	27428-10-15 23:17 G	11739219.34	11739219.47	11739219.60	0.0070	0.0002
Mercury	27429-01-11 23:45 G	11739307.37	11739307.49	11739307.62	0.0070	0.0012
Mercury	27429-04-10 00:29 G	11739395.39	11739395.52	11739395.64	0.0071	0.0022
Mercury	27429-07-07 00:57 G	11739483.43	11739483.54	11739483.66	0.0071	0.0032
Mercury	27429-10-03 01:26 G	11739571.46	11739571.56	11739571.67	0.0071	0.0042
Mercury	27429-12-30 02:09 G	11739659.51	11739659.59	11739659.68	0.0071	0.0052
Mercury	27430-03-28 02:53 G	11739747.56	11739747.62	11739747.68	0.0071	0.0062
Mars	27500-09-15 06:43 G	11765485.62	11765485.78	11765486.02	0.0081	0.0066
Moon	27503-06-29 00:00 G	11766502.27	11766502.50	11766502.73	0.0079	0.0033
Earth	27503-06-29 03:07 G	11766502.40	11766502.63	11766502.87	0.0079	0.0033 *
Venus	27505-07-24 14:24 G	11767258.95	11767259.10	11767259.28	0.0078	0.0052

Venus	27506-03-07 00:00 G	11767484.30	11767484.50	11767484.72	0.0078	0.0026
Mercury	27513-03-19 09:50 G	11770053.84	11770053.91	11770054.02	0.0074	0.0066
Mercury	27513-06-15 12:43 G	11770141.89	11770142.03	11770142.19	0.0074	0.0048
Mercury	27513-09-11 15:21 G	11770229.96	11770230.14	11770230.33	0.0074	0.0031
Mercury	27513-12-08 18:00 G	11770318.06	11770318.25	11770318.45	0.0074	0.0014
Mercury	27514-03-06 20:38 G	11770406.16	11770406.36	11770406.56	0.0073	0.0004
Mercury	27514-06-02 23:17 G	11770494.28	11770494.47	11770494.66	0.0073	0.0021
Mercury	27514-08-30 01:41 G	11770582.40	11770582.57	11770582.74	0.0073	0.0038
Mercury	27514-11-26 04:05 G	11770670.55	11770670.67	11770670.81	0.0073	0.0055
Mercury	27515-02-22 06:29 G	11770758.74	11770758.77	11770758.82	0.0073	0.0071
Moon	27662-12-29 15:07 G	11824760.89	11824761.13	11824761.39	0.0064	0.0004
Earth	27662-12-29 15:21 G	11824760.89	11824761.14	11824761.41	0.0064	0.0007 *
Venus	27666-06-08 17:17 G	11826018.03	11826018.22	11826018.44	0.0066	0.0023
Venus	27667-01-19 21:50 G	11826243.22	11826243.41	11826243.63	0.0066	0.0024
Mercury	27675-03-07 03:07 G	11829211.62	11829211.63	11829211.68	0.0070	0.0068
Mercury	27675-06-03 03:50 G	11829299.60	11829299.66	11829299.74	0.0070	0.0058
Mercury	27675-08-30 04:19 G	11829387.60	11829387.68	11829387.79	0.0070	0.0049
Mercury	27675-11-26 05:02 G	11829475.61	11829475.71	11829475.83	0.0070	0.0039
Mercury	27676-02-22 05:45 G	11829563.62	11829563.74	11829563.86	0.0070	0.0029
Mercury	27676-05-20 06:14 G	11829651.64	11829651.76	11829651.89	0.0070	0.0020
Mercury	27676-08-16 06:57 G	11829739.66	11829739.79	11829739.92	0.0070	0.0010
Mercury	27676-11-12 07:26 G	11829827.68	11829827.81	11829827.94	0.0070	0.0001
Mercury	27677-02-08 07:55 G	11829915.71	11829915.83	11829915.97	0.0070	0.0011
Mercury	27677-05-07 08:24 G	11830003.74	11830003.85	11830003.99	0.0071	0.0021
Mercury	27677-08-03 09:07 G	11830091.77	11830091.88	11830092.00	0.0071	0.0030
Mercury	27677-10-30 09:50 G	11830179.80	11830179.91	11830180.02	0.0071	0.0040
Mercury	27678-01-26 10:05 G	11830267.84	11830267.92	11830268.03	0.0071	0.0051
Mercury	27678-04-24 10:33 G	11830355.89	11830355.94	11830356.03	0.0071	0.0061
Mercury	27678-07-21 11:31 G	11830443.98	11830443.98	11830443.99	0.0071	0.0071
Earth	27751-07-01 10:48 G	11857085.69	11857085.95	11857086.21	0.0079	0.0006

Moon	27751-07-01 13:12 G	11857085.80	11857086.05	11857086.32	0.0079	0.0011 *
Venus	27753-06-27 18:43 G	11857813.18	11857813.28	11857813.38	0.0078	0.0070
Venus	27754-02-08 04:05 G	11858038.45	11858038.67	11858038.89	0.0078	0.0009
Mercury	27761-04-15 15:21 G	11860662.09	11860662.14	11860662.25	0.0074	0.0068
Mercury	27761-07-12 18:14 G	11860750.13	11860750.26	11860750.42	0.0074	0.0050
Mercury	27761-10-08 20:53 G	11860838.21	11860838.37	11860838.57	0.0074	0.0033
Mercury	27762-01-04 23:31 G	11860926.30	11860926.48	11860926.69	0.0074	0.0016
Mercury	27762-04-03 02:24 G	11861014.40	11861014.60	11861014.80	0.0074	0.0002
Mercury	27762-06-30 04:48 G	11861102.52	11861102.70	11861102.90	0.0073	0.0019
Mercury	27762-09-26 07:12 G	11861190.64	11861190.80	11861190.99	0.0073	0.0037
Mercury	27762-12-23 09:36 G	11861278.79	11861278.90	11861279.06	0.0073	0.0054
Mercury	27763-03-21 12:00 G	11861366.97	11861367.00	11861367.08	0.0073	0.0070
Mars	27905-12-30 01:12 G	11913514.35	11913514.55	11913514.79	0.0063	0.0040
Moon	27911-01-03 02:38 G	11915344.34	11915344.61	11915344.88	0.0064	0.0003
Earth	27911-01-03 04:05 G	11915344.42	11915344.67	11915344.94	0.0064	0.0001 *
Venus	27914-05-15 01:26 G	11916572.36	11916572.56	11916572.78	0.0066	0.0022
Venus	27914-12-26 05:45 G	11916797.55	11916797.74	11916797.96	0.0066	0.0025
Mercury	27923-04-05 12:14 G	11919819.97	11919820.01	11919820.07	0.0070	0.0064
Mercury	27923-07-02 12:57 G	11919907.97	11919908.04	11919908.13	0.0070	0.0054
Mercury	27923-09-28 13:26 G	11919995.97	11919996.06	11919996.17	0.0070	0.0045
Mercury	27923-12-25 14:09 G	11920083.98	11920084.09	11920084.21	0.0070	0.0035
Mercury	27924-03-22 14:53 G	11920172.00	11920172.12	11920172.24	0.0070	0.0025
Mercury	27924-06-18 15:21 G	11920260.01	11920260.14	11920260.27	0.0070	0.0016
Mercury	27924-09-14 15:50 G	11920348.03	11920348.16	11920348.29	0.0070	0.0006
Mercury	27924-12-11 16:33 G	11920436.06	11920436.19	11920436.32	0.0070	0.0004
Mercury	27925-03-09 17:02 G	11920524.08	11920524.21	11920524.34	0.0070	0.0014
Mercury	27925-06-05 17:31 G	11920612.11	11920612.23	11920612.36	0.0071	0.0024
Mercury	27925-09-01 18:14 G	11920700.15	11920700.26	11920700.37	0.0071	0.0034
Mercury	27925-11-28 18:57 G	11920788.18	11920788.29	11920788.39	0.0071	0.0044
Mercury	27926-02-24 19:12 G	11920876.23	11920876.30	11920876.39	0.0071	0.0055

Mercury	27926-05-23 19:41 G	11920964.28	11920964.32	11920964.39	0.0071	0.0065
Moon	27999-07-04 22:19 G	11947669.19	11947669.43	11947669.69	0.0079	0.0005
Earth	27999-07-04 23:31 G	11947669.22	11947669.48	11947669.74	0.0079	0.0005 *

# 29TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 29th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	28001-06-02 00:57 G		11948367.50	11948367.54	11948367.65	0.0078	0.0075	
Venus	28002-01-13 11:17 G		11948592.75	11948592.97	11948593.19	0.0078	0.0005	
Mercury	28009-05-13 23:02 G		11951270.37	11951270.46	11951270.58	0.0074	0.0062	
Mercury	28009-08-10 01:55 G		11951358.43	11951358.58	11951358.74	0.0074	0.0044	
Mercury	28009-11-06 04:19 G		11951446.51	11951446.68	11951446.88	0.0074	0.0027	
Mercury	28010-02-02 06:57 G		11951534.60	11951534.79	11951535.00	0.0074	0.0010	
Mercury	28010-05-01 09:50 G		11951622.71	11951622.91	11951623.11	0.0074	0.0008	
Mercury	28010-07-28 12:00 G		11951710.83	11951711.00	11951711.20	0.0073	0.0026	
Mercury	28010-10-24 14:24 G		11951798.96	11951799.10	11951799.28	0.0073	0.0043	
Mercury	28011-01-20 16:48 G		11951887.11	11951887.20	11951887.34	0.0073	0.0060	
Mars	28154-04-10 08:09 G		12004196.56	12004196.84	12004197.13	0.0063	0.0010	
Earth	28159-01-05 18:29 G		12005928.01	12005928.27	12005928.53	0.0065	0.0002	
Moon	28159-01-05 20:38 G		12005928.11	12005928.36	12005928.61	0.0065	0.0000 *	
Venus	28161-09-05 06:00 G		12006901.70	12006901.75	12006901.85	0.0066	0.0062	
Venus	28162-04-18 10:33 G		12007126.74	12007126.94	12007127.17	0.0066	0.0016	



Venus	28162-11-29 15:21 G	12007351.95	12007352.14	12007352.34	0.0066	0.0031
Mercury	28171-02-03 21:07 G	12010340.36	12010340.38	12010340.43	0.0069	0.0067
Mercury	28171-05-02 21:50 G	12010428.34	12010428.41	12010428.49	0.0070	0.0057
Mercury	28171-07-29 22:19 G	12010516.35	12010516.43	12010516.54	0.0070	0.0048
Mercury	28171-10-25 22:48 G	12010604.35	12010604.45	12010604.57	0.0070	0.0038
Mercury	28172-01-21 23:31 G	12010692.37	12010692.48	12010692.61	0.0070	0.0028
Mercury	28172-04-19 00:14 G	12010780.38	12010780.51	12010780.64	0.0070	0.0018
Mercury	28172-07-16 00:43 G	12010868.40	12010868.53	12010868.66	0.0070	0.0009
Mercury	28172-10-12 01:26 G	12010956.43	12010956.56	12010956.69	0.0070	0.0002
Mercury	28173-01-08 01:55 G	12011044.45	12011044.58	12011044.71	0.0070	0.0011
Mercury	28173-04-06 02:24 G	12011132.48	12011132.60	12011132.73	0.0071	0.0022
Mercury	28173-07-03 02:53 G	12011220.51	12011220.62	12011220.75	0.0071	0.0032
Mercury	28173-09-29 03:21 G	12011308.55	12011308.64	12011308.76	0.0071	0.0042
Mercury	28173-12-26 04:05 G	12011396.59	12011396.67	12011396.77	0.0071	0.0052
Mercury	28174-03-24 04:33 G	12011484.64	12011484.69	12011484.77	0.0071	0.0062
Earth	28247-07-08 17:31 G	12038252.97	12038253.23	12038253.49	0.0079	0.0003
Moon	28247-07-08 17:45 G	12038252.98	12038253.24	12038253.51	0.0079	0.0002 *
Venus	28249-05-07 11:31 G	12038921.86	12038921.98	12038922.13	0.0078	0.0063
Venus	28249-12-18 21:21 G	12039147.17	12039147.39	12039147.61	0.0078	0.0016
Mercury	28257-03-15 05:17 G	12041790.64	12041790.72	12041790.83	0.0074	0.0065
Mercury	28257-06-11 08:09 G	12041878.69	12041878.84	12041879.00	0.0074	0.0047
Mercury	28257-09-07 10:33 G	12041966.77	12041966.94	12041967.14	0.0074	0.0030
Mercury	28257-12-04 13:26 G	12042054.87	12042055.06	12042055.26	0.0074	0.0012
Mercury	28258-03-02 16:05 G	12042142.97	12042143.17	12042143.37	0.0074	0.0005
Mercury	28258-05-29 18:29 G	12042231.09	12042231.27	12042231.47	0.0073	0.0022
Mercury	28258-08-25 20:53 G	12042319.21	12042319.37	12042319.55	0.0073	0.0040
Mercury	28258-11-21 23:31 G	12042407.36	12042407.48	12042407.61	0.0073	0.0057
Moon	28407-01-09 10:05 G	12096511.67	12096511.92	12096512.19	0.0065	0.0013
Earth	28407-01-09 13:41 G	12096511.82	12096512.07	12096512.33	0.0065	0.0010 *
Venus	28409-08-10 18:00 G	12097456.12	12097456.25	12097456.44	0.0066	0.0045

Venus	28410-03-23 23:02 G	12097681.24	12097681.46	12097681.68	0.0066	0.0002
Venus	28410-11-04 03:21 G	12097906.51	12097906.64	12097906.80	0.0066	0.0049
Mercury	28418-12-06 06:43 G	12100860.74	12100860.78	12100860.84	0.0070	0.0064
Mercury	28419-03-04 07:26 G	12100948.73	12100948.81	12100948.90	0.0070	0.0054
Mercury	28419-05-31 07:55 G	12101036.74	12101036.83	12101036.94	0.0070	0.0045
Mercury	28419-08-27 08:24 G	12101124.75	12101124.85	12101124.97	0.0070	0.0035
Mercury	28419-11-23 09:07 G	12101212.76	12101212.88	12101213.01	0.0070	0.0025
Mercury	28420-02-19 09:50 G	12101300.78	12101300.91	12101301.04	0.0070	0.0015
Mercury	28420-05-17 10:19 G	12101388.80	12101388.93	12101389.06	0.0070	0.0006
Mercury	28420-08-13 11:02 G	12101476.83	12101476.96	12101477.09	0.0070	0.0005
Mercury	28420-11-09 11:31 G	12101564.85	12101564.98	12101565.11	0.0070	0.0014
Mercury	28421-02-05 12:00 G	12101652.89	12101653.00	12101653.13	0.0071	0.0025
Mercury	28421-05-04 12:29 G	12101740.92	12101741.02	12101741.15	0.0071	0.0035
Mercury	28421-07-31 13:12 G	12101828.96	12101829.05	12101829.16	0.0071	0.0045
Mercury	28421-10-27 13:41 G	12101917.00	12101917.07	12101917.16	0.0071	0.0055
Mercury	28422-01-23 14:24 G	12102005.06	12102005.10	12102005.16	0.0071	0.0065
Mars	28491-12-01 13:26 G	12127518.96	12127519.06	12127519.21	0.0081	0.0076
Earth	28495-07-11 16:05 G	12128836.93	12128837.17	12128837.42	0.0079	0.0027
Moon	28495-07-11 17:17 G	12128836.99	12128837.22	12128837.46	0.0079	0.0025 *
Venus	28497-04-11 00:43 G	12129476.34	12129476.53	12129476.72	0.0078	0.0038
Venus	28497-11-22 09:50 G	12129701.74	12129701.91	12129702.11	0.0078	0.0041
Mercury	28505-01-14 13:26 G	12132310.95	12132311.06	12132311.18	0.0074	0.0060
Mercury	28505-04-12 15:50 G	12132399.01	12132399.16	12132399.34	0.0074	0.0043
Mercury	28505-07-09 18:43 G	12132487.09	12132487.28	12132487.47	0.0074	0.0025
Mercury	28505-10-05 21:21 G	12132575.19	12132575.39	12132575.59	0.0074	0.0008
Mercury	28506-01-01 23:45 G	12132663.30	12132663.49	12132663.69	0.0074	0.0010
Mercury	28506-03-31 02:24 G	12132751.42	12132751.60	12132751.79	0.0073	0.0027
Mercury	28506-06-27 04:33 G	12132839.55	12132839.69	12132839.87	0.0073	0.0045
Mercury	28506-09-23 06:57 G	12132927.71	12132927.79	12132927.92	0.0073	0.0062
Moon	28654-01-11 18:43 G	12186729.16	12186729.28	12186729.46	0.0064	0.0054

Earth	28654-01-11 22:19 G	12186729.29	12186729.43	12186729.57	0.0064	0.0054	*
Earth	28655-01-13 10:33 G	12187095.72	12187095.94	12187096.19	0.0065	0.0029	
Moon	28655-01-13 14:24 G	12187095.87	12187096.10	12187096.33	0.0065	0.0028	*
Venus	28657-07-16 07:55 G	12188010.64	12188010.83	12188011.06	0.0066	0.0021	
Venus	28658-02-26 12:29 G	12188235.83	12188236.02	12188236.24	0.0066	0.0026	
Mercury	28666-07-11 16:19 G	12191293.16	12191293.18	12191293.23	0.0070	0.0067	
Mercury	28666-10-07 17:02 G	12191381.14	12191381.21	12191381.29	0.0070	0.0057	
Mercury	28667-01-03 17:17 G	12191469.14	12191469.22	12191469.33	0.0070	0.0048	
Mercury	28667-04-01 18:00 G	12191557.15	12191557.25	12191557.37	0.0070	0.0038	
Mercury	28667-06-28 18:43 G	12191645.16	12191645.28	12191645.40	0.0070	0.0028	
Mercury	28667-09-24 19:26 G	12191733.18	12191733.31	12191733.43	0.0070	0.0018	
Mercury	28667-12-21 19:55 G	12191821.20	12191821.33	12191821.46	0.0070	0.0008	
Mercury	28668-03-18 20:24 G	12191909.22	12191909.35	12191909.49	0.0070	0.0003	
Mercury	28668-06-14 21:07 G	12191997.25	12191997.38	12191997.51	0.0070	0.0011	
Mercury	28668-09-10 21:36 G	12192085.28	12192085.40	12192085.53	0.0071	0.0022	
Mercury	28668-12-07 22:05 G	12192173.31	12192173.42	12192173.55	0.0071	0.0032	
Mercury	28669-03-05 22:48 G	12192261.35	12192261.45	12192261.56	0.0071	0.0042	
Mercury	28669-06-01 23:17 G	12192349.39	12192349.47	12192349.57	0.0071	0.0052	
Mercury	28669-08-29 00:00 G	12192437.44	12192437.50	12192437.57	0.0071	0.0062	
Moon	28743-07-16 19:41 G	12219421.23	12219421.32	12219421.42	0.0079	0.0073	
Earth	28743-07-16 20:38 G	12219421.28	12219421.36	12219421.50	0.0079	0.0071	*
Venus	28744-08-04 07:26 G	12219805.76	12219805.81	12219805.89	0.0078	0.0075	
Venus	28745-03-17 17:17 G	12220031.00	12220031.22	12220031.44	0.0078	0.0005	
Mercury	28752-08-19 20:09 G	12222743.26	12222743.34	12222743.46	0.0074	0.0064	
Mercury	28752-11-15 23:02 G	12222831.31	12222831.46	12222831.63	0.0074	0.0045	
Mercury	28753-02-12 01:26 G	12222919.39	12222919.56	12222919.76	0.0074	0.0028	
Mercury	28753-05-11 04:19 G	12223007.49	12223007.68	12223007.88	0.0074	0.0010	
Mercury	28753-08-07 06:57 G	12223095.59	12223095.79	12223095.99	0.0074	0.0007	
Mercury	28753-11-03 09:21 G	12223183.71	12223183.89	12223184.09	0.0074	0.0025	
Mercury	28754-01-30 12:00 G	12223271.84	12223272.00	12223272.17	0.0073	0.0042	

Mercury	28754-04-28 14:09 G	12223359.99	12223360.09	12223360.23	0.0073	0.0059
Mars	28897-03-23 03:07 G	12275554.39	12275554.63	12275554.92	0.0063	0.0026
Earth	28902-01-16 00:00 G	12277313.27	12277313.50	12277313.75	0.0065	0.0025
Moon	28902-01-16 03:07 G	12277313.40	12277313.63	12277313.88	0.0065	0.0022 *
Moon	28903-01-17 08:53 G	12277679.76	12277679.87	12277680.03	0.0065	0.0055
Earth	28903-01-17 13:12 G	12277679.94	12277680.05	12277680.16	0.0065	0.0058 *
Venus	28904-11-07 19:55 G	12278340.16	12278340.33	12278340.54	0.0066	0.0033
Venus	28905-06-21 00:29 G	12278565.32	12278565.52	12278565.75	0.0066	0.0014
Venus	28906-02-01 04:33 G	12278790.63	12278790.69	12278790.80	0.0066	0.0061
Mercury	28914-02-14 02:24 G	12281725.57	12281725.60	12281725.67	0.0070	0.0065
Mercury	28914-05-13 03:07 G	12281813.56	12281813.63	12281813.72	0.0070	0.0055
Mercury	28914-08-09 03:50 G	12281901.57	12281901.66	12281901.76	0.0070	0.0045
Mercury	28914-11-05 04:19 G	12281989.58	12281989.68	12281989.80	0.0070	0.0036
Mercury	28915-02-01 04:48 G	12282077.59	12282077.70	12282077.83	0.0070	0.0026
Mercury	28915-04-30 05:31 G	12282165.61	12282165.73	12282165.86	0.0070	0.0016
Mercury	28915-07-27 06:14 G	12282253.63	12282253.76	12282253.89	0.0070	0.0006
Mercury	28915-10-23 06:43 G	12282341.65	12282341.78	12282341.91	0.0070	0.0004
Mercury	28916-01-19 07:12 G	12282429.68	12282429.80	12282429.93	0.0070	0.0014
Mercury	28916-04-16 07:55 G	12282517.71	12282517.83	12282517.95	0.0071	0.0024
Mercury	28916-07-13 08:24 G	12282605.74	12282605.85	12282605.97	0.0071	0.0034
Mercury	28916-10-09 09:07 G	12282693.78	12282693.88	12282693.98	0.0071	0.0044
Mercury	28917-01-05 09:36 G	12282781.82	12282781.90	12282781.99	0.0071	0.0054
Mercury	28917-04-03 09:50 G	12282869.88	12282869.91	12282869.98	0.0071	0.0065
Moon	28990-07-18 01:26 G	12309638.32	12309638.56	12309638.81	0.0079	0.0028
Earth	28990-07-18 02:09 G	12309638.36	12309638.59	12309638.85	0.0079	0.0025 *
Venus	28992-07-09 02:38 G	12310360.40	12310360.61	12310360.83	0.0078	0.0021
Venus	28993-02-19 12:00 G	12310585.86	12310586.00	12310586.15	0.0078	0.0058
Mercury	29000-03-25 04:33 G	12313175.59	12313175.69	12313175.82	0.0074	0.0060
Mercury	29000-06-21 07:26 G	12313263.65	12313263.81	12313263.98	0.0074	0.0042
Mercury	29000-09-17 09:50 G	12313351.74	12313351.91	12313352.11	0.0074	0.0025

Mercury 29000-12-14 12:43 G 12313439.83 12313440.03 12313440.23 0.0074 0.0007

# 30TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 30th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	29001-03-12 15:07	G	12313527.94	12313528.13	12313528.34	0.0074	0.0011	
Mercury	29001-06-08 17:31	G	12313616.06	12313616.23	12313616.43	0.0074	0.0029	
Mercury	29001-09-04 19:55	G	12313704.20	12313704.33	12313704.51	0.0073	0.0046	
Mercury	29001-12-01 22:33	G	12313792.35	12313792.44	12313792.56	0.0073	0.0063	
Moon	29150-01-20 00:57	G	12367897.29	12367897.54	12367897.80	0.0065	0.0012	
Earth	29150-01-20 04:19	G	12367897.44	12367897.68	12367897.95	0.0065	0.0012	*
Venus	29152-03-02 09:21	G	12368669.72	12368669.89	12368670.07	0.0066	0.0039	
Venus	29152-10-13 13:41	G	12368894.86	12368895.07	12368895.30	0.0066	0.0008	
Venus	29153-05-26 18:00	G	12369120.14	12369120.25	12369120.39	0.0066	0.0055	
Mercury	29161-06-23 12:43	G	12372070.02	12372070.03	12372070.06	0.0069	0.0069	
Mercury	29161-09-19 13:26	G	12372158.00	12372158.06	12372158.13	0.0070	0.0059	
Mercury	29161-12-16 13:41	G	12372246.00	12372246.07	12372246.18	0.0070	0.0050	
Mercury	29162-03-14 14:24	G	12372334.00	12372334.10	12372334.22	0.0070	0.0040	
Mercury	29162-06-10 15:07	G	12372422.02	12372422.13	12372422.25	0.0070	0.0030	
Mercury	29162-09-06 15:36	G	12372510.03	12372510.15	12372510.28	0.0070	0.0020	
Mercury	29162-12-03 16:19	G	12372598.05	12372598.18	12372598.31	0.0070	0.0010	
Mercury	29163-03-01 16:48	G	12372686.07	12372686.20	12372686.33	0.0070	0.0002	

Mercury	29163-05-28 17:31 G	12372774.10	12372774.23	12372774.36	0.0070	0.0010
Mercury	29163-08-24 18:00 G	12372862.13	12372862.25	12372862.38	0.0071	0.0020
Mercury	29163-11-20 18:29 G	12372950.16	12372950.27	12372950.39	0.0071	0.0030
Mercury	29164-02-16 19:12 G	12373038.19	12373038.30	12373038.41	0.0071	0.0040
Mercury	29164-05-14 19:41 G	12373126.23	12373126.32	12373126.42	0.0071	0.0050
Mercury	29164-08-10 20:24 G	12373214.28	12373214.35	12373214.42	0.0071	0.0060
Mercury	29164-11-06 20:53 G	12373302.37	12373302.37	12373302.38	0.0071	0.0071
Mars	29234-11-13 01:26 G	12398875.33	12398875.56	12398875.86	0.0081	0.0053
Earth	29238-07-22 17:02 G	12400223.05	12400223.21	12400223.42	0.0079	0.0054
Moon	29238-07-22 18:43 G	12400223.13	12400223.28	12400223.49	0.0079	0.0055 *
Venus	29239-11-01 15:21 G	12400689.95	12400690.14	12400690.36	0.0078	0.0030
Venus	29240-06-14 01:12 G	12400915.39	12400915.55	12400915.72	0.0078	0.0050
Mercury	29247-08-01 12:14 G	12403519.93	12403520.01	12403520.12	0.0074	0.0065
Mercury	29247-10-28 15:07 G	12403607.98	12403608.13	12403608.29	0.0074	0.0046
Mercury	29248-01-24 17:31 G	12403696.06	12403696.23	12403696.43	0.0074	0.0029
Mercury	29248-04-21 20:24 G	12403784.15	12403784.35	12403784.55	0.0074	0.0011
Mercury	29248-07-18 23:02 G	12403872.26	12403872.46	12403872.66	0.0074	0.0007
Mercury	29248-10-15 01:12 G	12403960.38	12403960.55	12403960.75	0.0074	0.0025
Mercury	29249-01-11 03:50 G	12404048.51	12404048.66	12404048.84	0.0073	0.0042
Mercury	29249-04-09 06:29 G	12404136.66	12404136.77	12404136.89	0.0073	0.0059
Mars	29391-11-25 03:07 G	12456230.38	12456230.63	12456230.92	0.0063	0.0022
Moon	29397-01-21 20:09 G	12458115.11	12458115.34	12458115.61	0.0065	0.0024
Earth	29397-01-21 23:17 G	12458115.25	12458115.47	12458115.73	0.0065	0.0026 *
Earth	29398-01-23 11:45 G	12458481.91	12458481.99	12458482.14	0.0065	0.0058
Moon	29398-01-23 15:21 G	12458482.04	12458482.14	12458482.30	0.0065	0.0056 *
Venus	29399-06-25 00:43 G	12458999.36	12458999.53	12458999.73	0.0066	0.0037
Venus	29400-02-05 05:17 G	12459224.51	12459224.72	12459224.94	0.0066	0.0010
Venus	29400-09-18 09:21 G	12459449.80	12459449.89	12459450.02	0.0066	0.0057
Mercury	29408-10-30 23:45 G	12462414.47	12462414.49	12462414.51	0.0069	0.0068
Mercury	29409-01-27 00:00 G	12462502.44	12462502.50	12462502.58	0.0070	0.0059

Mercury	29409-04-25 00:43 G	12462590.44	12462590.53	12462590.63	0.0070	0.0049
Mercury	29409-07-22 01:26 G	12462678.45	12462678.56	12462678.67	0.0070	0.0039
Mercury	29409-10-18 01:41 G	12462766.46	12462766.57	12462766.70	0.0070	0.0030
Mercury	29410-01-14 02:24 G	12462854.48	12462854.60	12462854.73	0.0070	0.0020
Mercury	29410-04-12 03:07 G	12462942.50	12462942.63	12462942.76	0.0070	0.0010
Mercury	29410-07-09 03:36 G	12463030.52	12463030.65	12463030.78	0.0070	0.0001
Mercury	29410-10-05 04:05 G	12463118.55	12463118.67	12463118.81	0.0070	0.0011
Mercury	29411-01-01 04:33 G	12463206.58	12463206.69	12463206.83	0.0070	0.0021
Mercury	29411-03-30 05:17 G	12463294.61	12463294.72	12463294.84	0.0071	0.0030
Mercury	29411-06-26 05:45 G	12463382.64	12463382.74	12463382.86	0.0071	0.0041
Mercury	29411-09-22 06:14 G	12463470.68	12463470.76	12463470.86	0.0071	0.0051
Mercury	29411-12-19 06:57 G	12463558.73	12463558.79	12463558.86	0.0071	0.0061
Earth	29485-07-25 07:41 G	12490440.57	12490440.82	12490441.08	0.0079	0.0012
Moon	29485-07-25 07:55 G	12490440.60	12490440.83	12490441.09	0.0079	0.0017 *
Venus	29487-02-24 06:14 G	12491019.56	12491019.76	12491019.97	0.0078	0.0030
Venus	29487-10-07 15:21 G	12491245.00	12491245.14	12491245.34	0.0078	0.0051
Mercury	29494-12-08 20:09 G	12493864.27	12493864.34	12493864.46	0.0074	0.0065
Mercury	29495-03-06 23:02 G	12493952.32	12493952.46	12493952.63	0.0074	0.0047
Mercury	29495-06-03 01:41 G	12494040.40	12494040.57	12494040.77	0.0074	0.0029
Mercury	29495-08-30 04:33 G	12494128.50	12494128.69	12494128.89	0.0074	0.0011
Mercury	29495-11-26 07:12 G	12494216.60	12494216.80	12494217.00	0.0074	0.0007
Mercury	29496-02-22 09:50 G	12494304.72	12494304.91	12494305.10	0.0074	0.0024
Mercury	29496-05-20 12:00 G	12494392.85	12494393.00	12494393.18	0.0073	0.0042
Mercury	29496-08-16 14:38 G	12494481.00	12494481.11	12494481.24	0.0073	0.0059
Moon	29644-01-25 18:29 G	12548333.19	12548333.27	12548333.41	0.0065	0.0059
Earth	29644-01-25 20:38 G	12548333.26	12548333.36	12548333.52	0.0065	0.0056 *
Earth	29645-01-26 09:50 G	12548699.68	12548699.91	12548700.16	0.0065	0.0027
Moon	29645-01-26 12:57 G	12548699.84	12548700.04	12548700.29	0.0065	0.0031 *
Venus	29646-10-17 17:45 G	12549329.06	12549329.24	12549329.46	0.0066	0.0028
Venus	29647-05-30 22:19 G	12549554.23	12549554.43	12549554.65	0.0066	0.0019

Venus	29648-01-11 02:53 G	12549779.62	12549779.62	12549779.63	0.0066	0.0066
Mercury	29656-03-08 10:33 G	12552758.91	12552758.94	12552759.00	0.0070	0.0065
Mercury	29656-06-04 11:17 G	12552846.90	12552846.97	12552847.06	0.0070	0.0055
Mercury	29656-08-31 12:00 G	12552934.90	12552935.00	12552935.10	0.0070	0.0045
Mercury	29656-11-27 12:14 G	12553022.91	12553023.01	12553023.14	0.0070	0.0036
Mercury	29657-02-23 12:57 G	12553110.93	12553111.04	12553111.17	0.0070	0.0026
Mercury	29657-05-22 13:41 G	12553198.94	12553199.07	12553199.20	0.0070	0.0016
Mercury	29657-08-18 14:09 G	12553286.96	12553287.09	12553287.22	0.0070	0.0006
Mercury	29657-11-14 14:53 G	12553374.99	12553375.12	12553375.25	0.0070	0.0004
Mercury	29658-02-10 15:21 G	12553463.01	12553463.14	12553463.27	0.0070	0.0014
Mercury	29658-05-09 15:50 G	12553551.04	12553551.16	12553551.29	0.0071	0.0024
Mercury	29658-08-05 16:19 G	12553639.08	12553639.18	12553639.30	0.0071	0.0035
Mercury	29658-11-01 16:48 G	12553727.11	12553727.20	12553727.31	0.0071	0.0045
Mercury	29659-01-28 17:31 G	12553815.16	12553815.23	12553815.32	0.0071	0.0055
Mercury	29659-04-26 18:14 G	12553903.21	12553903.26	12553903.31	0.0071	0.0065
Moon	29732-07-28 01:55 G	12580658.43	12580658.58	12580658.78	0.0080	0.0057
Earth	29732-07-28 02:24 G	12580658.46	12580658.60	12580658.81	0.0080	0.0060 *
Venus	29734-06-19 00:29 G	12581349.31	12581349.52	12581349.74	0.0078	0.0014
Venus	29735-01-30 09:21 G	12581574.80	12581574.89	12581575.04	0.0078	0.0067
Mercury	29742-01-19 03:50 G	12584120.65	12584120.66	12584120.71	0.0074	0.0074
Mercury	29742-04-17 06:29 G	12584208.65	12584208.77	12584208.92	0.0074	0.0056
Mercury	29742-07-14 09:21 G	12584296.72	12584296.89	12584297.07	0.0074	0.0037
Mercury	29742-10-10 12:00 G	12584384.81	12584385.00	12584385.20	0.0074	0.0019
Mercury	29743-01-06 14:38 G	12584472.91	12584473.11	12584473.31	0.0074	0.0002
Mercury	29743-04-04 17:17 G	12584561.03	12584561.22	12584561.42	0.0074	0.0016
Mercury	29743-07-01 19:41 G	12584649.15	12584649.32	12584649.51	0.0074	0.0034
Mercury	29743-09-27 21:50 G	12584737.29	12584737.41	12584737.58	0.0073	0.0052
Mercury	29743-12-25 00:29 G	12584825.47	12584825.52	12584825.61	0.0073	0.0069
Earth	29892-01-30 11:31 G	12638917.72	12638917.98	12638918.24	0.0065	0.0008
Moon	29892-01-30 14:24 G	12638917.85	12638918.10	12638918.36	0.0065	0.0008 *



Venus	29893-06-29 09:07 G	12639433.77	12639433.88	12639434.01	0.0065	0.0055
Venus	29894-02-09 13:41 G	12639658.85	12639659.07	12639659.29	0.0066	0.0009
Venus	29894-09-22 17:45 G	12639884.07	12639884.24	12639884.43	0.0066	0.0038
Mercury	29903-04-20 21:50 G	12643015.38	12643015.41	12643015.47	0.0069	0.0066
Mercury	29903-07-17 22:33 G	12643103.37	12643103.44	12643103.53	0.0070	0.0056
Mercury	29903-10-13 23:17 G	12643191.38	12643191.47	12643191.57	0.0070	0.0046
Mercury	29904-01-09 23:31 G	12643279.39	12643279.48	12643279.61	0.0070	0.0037
Mercury	29904-04-07 00:14 G	12643367.40	12643367.51	12643367.64	0.0070	0.0027
Mercury	29904-07-04 00:57 G	12643455.42	12643455.54	12643455.67	0.0070	0.0017
Mercury	29904-09-30 01:26 G	12643543.44	12643543.56	12643543.70	0.0070	0.0008
Mercury	29904-12-27 02:09 G	12643631.46	12643631.59	12643631.72	0.0070	0.0003
Mercury	29905-03-25 02:38 G	12643719.49	12643719.61	12643719.74	0.0070	0.0013
Mercury	29905-06-21 03:07 G	12643807.51	12643807.63	12643807.76	0.0070	0.0024
Mercury	29905-09-17 03:36 G	12643895.55	12643895.65	12643895.78	0.0071	0.0034
Mercury	29905-12-14 04:19 G	12643983.58	12643983.68	12643983.79	0.0071	0.0044
Mercury	29906-03-12 05:02 G	12644071.63	12644071.71	12644071.79	0.0071	0.0054
Mercury	29906-06-08 05:17 G	12644159.68	12644159.72	12644159.79	0.0071	0.0065
Moon	29980-08-02 05:31 G	12671243.56	12671243.73	12671243.94	0.0079	0.0055
Earth	29980-08-02 05:45 G	12671243.58	12671243.74	12671243.93	0.0079	0.0057 *
Venus	29981-02-28 10:33 G	12671453.86	12671453.94	12671454.06	0.0079	0.0070
Venus	29981-10-11 20:38 G	12671679.14	12671679.36	12671679.58	0.0078	0.0011
Mercury	29989-05-28 14:38 G	12674465.02	12674465.11	12674465.26	0.0074	0.0060
Mercury	29989-08-24 17:31 G	12674553.08	12674553.23	12674553.41	0.0074	0.0041
Mercury	29989-11-20 20:09 G	12674641.16	12674641.34	12674641.54	0.0074	0.0023
Mercury	29990-02-16 23:02 G	12674729.26	12674729.46	12674729.66	0.0074	0.0005
Mercury	29990-05-16 01:41 G	12674817.37	12674817.57	12674817.77	0.0074	0.0013
Mercury	29990-08-12 03:50 G	12674905.50	12674905.66	12674905.86	0.0074	0.0031
Mercury	29990-11-08 06:43 G	12674993.64	12674993.78	12674993.94	0.0074	0.0048
Mercury	29991-02-04 08:53 G	12675081.80	12675081.87	12675081.98	0.0073	0.0066

# 31ST MILLENNIUM CE

**This is a list of transits visible from Pluto in the 31st millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mars	30132-12-20 09:50 G		12726900.62	12726900.91	12726901.19	0.0063	0.0003	
Earth	30139-02-02 16:05 G		12729135.92	12729136.17	12729136.44	0.0065	0.0003	
Moon	30139-02-02 18:00 G		12729136.00	12729136.25	12729136.51	0.0065	0.0005	*
Venus	30140-10-22 06:43 G		12729763.59	12729763.78	12729763.99	0.0065	0.0028	
Venus	30141-06-04 11:02 G		12729988.76	12729988.96	12729989.19	0.0066	0.0019	
Venus	30142-01-15 15:50 G		12730214.14	12730214.16	12730214.18	0.0066	0.0065	
Mercury	30150-05-31 09:50 G		12733271.86	12733271.91	12733271.98	0.0070	0.0062	
Mercury	30150-08-27 10:33 G		12733359.86	12733359.94	12733360.03	0.0070	0.0052	
Mercury	30150-11-23 11:02 G		12733447.86	12733447.96	12733448.07	0.0070	0.0042	
Mercury	30151-02-19 11:45 G		12733535.88	12733535.99	12733536.11	0.0070	0.0032	
Mercury	30151-05-18 12:14 G		12733623.89	12733624.01	12733624.14	0.0070	0.0023	
Mercury	30151-08-14 12:43 G		12733711.91	12733712.03	12733712.17	0.0070	0.0013	
Mercury	30151-11-10 13:26 G		12733799.93	12733800.06	12733800.19	0.0070	0.0003	
Mercury	30152-02-06 13:55 G		12733887.95	12733888.08	12733888.21	0.0070	0.0008	
Mercury	30152-05-04 14:38 G		12733975.98	12733976.11	12733976.24	0.0070	0.0017	
Mercury	30152-07-31 15:07 G		12734064.01	12734064.13	12734064.25	0.0071	0.0028	
Mercury	30152-10-27 15:36 G		12734152.05	12734152.15	12734152.27	0.0071	0.0038	
Mercury	30153-01-23 16:19 G		12734240.09	12734240.18	12734240.28	0.0071	0.0048	
Mercury	30153-04-21 16:33 G		12734328.14	12734328.19	12734328.28	0.0071	0.0059	

Mercury	30153-07-18 17:17 G	12734416.21	12734416.22	12734416.26	0.0071	0.0069
Earth	30227-08-06 11:45 G	12761461.80	12761461.99	12761462.21	0.0079	0.0047
Moon	30227-08-06 13:12 G	12761461.86	12761462.05	12761462.28	0.0079	0.0050 *
Venus	30228-06-23 11:02 G	12761783.76	12761783.96	12761784.18	0.0079	0.0024
Venus	30229-02-03 20:24 G	12762009.22	12762009.35	12762009.52	0.0078	0.0057
Mercury	30236-04-11 22:48 G	12764633.39	12764633.45	12764633.55	0.0074	0.0069
Mercury	30236-07-09 01:26 G	12764721.44	12764721.56	12764721.73	0.0074	0.0051
Mercury	30236-10-05 04:19 G	12764809.51	12764809.68	12764809.87	0.0074	0.0032
Mercury	30237-01-01 06:57 G	12764897.60	12764897.79	12764898.00	0.0074	0.0014
Mercury	30237-03-30 09:50 G	12764985.71	12764985.91	12764986.11	0.0074	0.0004
Mercury	30237-06-26 12:14 G	12765073.83	12765074.01	12765074.21	0.0074	0.0022
Mercury	30237-09-22 14:38 G	12765161.96	12765162.11	12765162.29	0.0074	0.0040
Mercury	30237-12-19 17:17 G	12765250.11	12765250.22	12765250.36	0.0074	0.0057
Mars	30379-05-14 04:33 G	12816894.57	12816894.69	12816894.88	0.0063	0.0053
Earth	30386-02-06 01:55 G	12819354.32	12819354.58	12819354.84	0.0065	0.0001
Moon	30386-02-06 01:55 G	12819354.33	12819354.58	12819354.83	0.0065	0.0002 *
Venus	30387-07-05 02:53 G	12819868.44	12819868.62	12819868.81	0.0065	0.0036
Venus	30388-02-15 07:12 G	12820093.59	12820093.80	12820094.02	0.0066	0.0010
Venus	30388-09-27 11:17 G	12820318.88	12820318.97	12820319.10	0.0066	0.0057
Mercury	30397-04-14 22:05 G	12823440.37	12823440.42	12823440.49	0.0070	0.0062
Mercury	30397-07-11 22:33 G	12823528.37	12823528.44	12823528.54	0.0070	0.0052
Mercury	30397-10-07 23:17 G	12823616.37	12823616.47	12823616.58	0.0070	0.0042
Mercury	30398-01-04 00:00 G	12823704.38	12823704.50	12823704.61	0.0070	0.0032
Mercury	30398-04-02 00:14 G	12823792.40	12823792.51	12823792.64	0.0070	0.0023
Mercury	30398-06-29 00:57 G	12823880.42	12823880.54	12823880.67	0.0070	0.0013
Mercury	30398-09-25 01:41 G	12823968.44	12823968.57	12823968.70	0.0070	0.0003
Mercury	30398-12-22 02:09 G	12824056.46	12824056.59	12824056.72	0.0070	0.0007
Mercury	30399-03-20 02:38 G	12824144.49	12824144.61	12824144.74	0.0070	0.0018
Mercury	30399-06-16 03:07 G	12824232.52	12824232.63	12824232.76	0.0071	0.0028
Mercury	30399-09-12 03:50 G	12824320.55	12824320.66	12824320.77	0.0071	0.0038

Mercury	30399-12-09 04:33 G	12824408.59	12824408.69	12824408.78	0.0071	0.0048
Mercury	30400-03-06 04:48 G	12824496.64	12824496.70	12824496.78	0.0071	0.0059
Mercury	30400-06-02 05:17 G	12824584.71	12824584.72	12824584.76	0.0071	0.0069
Earth	30474-08-08 23:02 G	12851680.27	12851680.46	12851680.66	0.0079	0.0050
Moon	30474-08-09 01:55 G	12851680.38	12851680.58	12851680.80	0.0079	0.0047 *
Venus	30475-03-05 04:19 G	12851888.52	12851888.68	12851888.88	0.0079	0.0045
Venus	30475-10-16 14:09 G	12852113.91	12852114.09	12852114.30	0.0078	0.0037
Mercury	30483-02-24 08:24 G	12854801.81	12854801.85	12854801.94	0.0074	0.0071
Mercury	30483-05-23 11:31 G	12854889.84	12854889.98	12854890.13	0.0074	0.0052
Mercury	30483-08-19 14:09 G	12854977.92	12854978.09	12854978.27	0.0074	0.0034
Mercury	30483-11-15 16:48 G	12855066.01	12855066.20	12855066.40	0.0074	0.0016
Mercury	30484-02-11 19:26 G	12855154.11	12855154.31	12855154.51	0.0074	0.0002
Mercury	30484-05-09 22:05 G	12855242.23	12855242.42	12855242.61	0.0074	0.0020
Mercury	30484-08-06 00:29 G	12855330.36	12855330.52	12855330.70	0.0074	0.0038
Mercury	30484-11-02 02:38 G	12855418.50	12855418.61	12855418.76	0.0074	0.0056
Mercury	30485-01-29 05:31 G	12855506.72	12855506.73	12855506.76	0.0073	0.0073
Moon	30633-02-09 12:29 G	12909572.78	12909573.02	12909573.28	0.0065	0.0009
Earth	30633-02-09 14:24 G	12909572.85	12909573.10	12909573.36	0.0065	0.0010 *
Venus	30634-03-17 00:29 G	12909973.35	12909973.52	12909973.72	0.0065	0.0036
Venus	30634-10-28 05:17 G	12910198.50	12910198.72	12910198.94	0.0066	0.0010
Venus	30635-06-10 09:07 G	12910423.79	12910423.88	12910424.01	0.0066	0.0057
Mercury	30643-12-02 10:19 G	12913520.91	12913520.93	12913520.97	0.0069	0.0067
Mercury	30644-02-28 11:02 G	12913608.89	12913608.96	12913609.04	0.0070	0.0057
Mercury	30644-05-26 11:17 G	12913696.89	12913696.97	12913697.08	0.0070	0.0048
Mercury	30644-08-22 12:00 G	12913784.90	12913785.00	12913785.12	0.0070	0.0038
Mercury	30644-11-18 12:29 G	12913872.91	12913873.02	12913873.15	0.0070	0.0028
Mercury	30645-02-14 13:12 G	12913960.93	12913961.05	12913961.18	0.0070	0.0018
Mercury	30645-05-13 13:55 G	12914048.95	12914049.08	12914049.21	0.0070	0.0008
Mercury	30645-08-09 14:24 G	12914136.97	12914137.10	12914137.23	0.0070	0.0002
Mercury	30645-11-05 14:53 G	12914225.00	12914225.12	12914225.25	0.0070	0.0012

Mercury	30646-02-01 15:21 G	12914313.02	12914313.14	12914313.27	0.0070	0.0023
Mercury	30646-04-30 16:05 G	12914401.06	12914401.17	12914401.29	0.0071	0.0033
Mercury	30646-07-27 16:33 G	12914489.09	12914489.19	12914489.30	0.0071	0.0043
Mercury	30646-10-23 17:17 G	12914577.14	12914577.22	12914577.31	0.0071	0.0053
Mercury	30647-01-19 17:31 G	12914665.19	12914665.23	12914665.30	0.0071	0.0064
Mars	30716-12-28 19:55 G	12940209.98	12940210.33	12940210.69	0.0081	0.0003
Moon	30720-08-11 10:05 G	12941531.85	12941531.92	12941532.06	0.0080	0.0073
Earth	30720-08-11 13:55 G	12941531.99	12941532.08	12941532.19	0.0080	0.0073 *
Venus	30721-11-16 02:38 G	12941993.44	12941993.61	12941993.81	0.0079	0.0044
Venus	30722-06-29 12:14 G	12942218.84	12942219.01	12942219.23	0.0078	0.0038
Mercury	30730-01-09 20:24 G	12944970.25	12944970.35	12944970.49	0.0074	0.0060
Mercury	30730-04-07 23:02 G	12945058.31	12945058.46	12945058.64	0.0074	0.0041
Mercury	30730-07-05 01:41 G	12945146.40	12945146.57	12945146.78	0.0074	0.0024
Mercury	30730-10-01 04:33 G	12945234.50	12945234.69	12945234.89	0.0074	0.0005
Mercury	30730-12-28 07:12 G	12945322.61	12945322.80	12945323.00	0.0074	0.0013
Mercury	30731-03-26 09:36 G	12945410.73	12945410.90	12945411.09	0.0074	0.0031
Mercury	30731-06-22 12:00 G	12945498.87	12945499.00	12945499.17	0.0074	0.0049
Mercury	30731-09-18 14:24 G	12945587.04	12945587.10	12945587.21	0.0074	0.0067
Earth	30879-02-11 18:14 G	12999425.12	12999425.26	12999425.43	0.0065	0.0052
Moon	30879-02-11 22:05 G	12999425.26	12999425.42	12999425.58	0.0065	0.0051 *
Moon	30880-02-13 04:05 G	12999791.46	12999791.67	12999791.92	0.0065	0.0030
Earth	30880-02-13 07:41 G	12999791.59	12999791.82	12999792.05	0.0065	0.0032 *
Venus	30880-11-26 01:26 G	13000078.37	13000078.56	13000078.77	0.0065	0.0027
Venus	30881-07-09 05:45 G	13000303.54	13000303.74	13000303.96	0.0066	0.0020
Mercury	30890-07-19 23:17 G	13003601.45	13003601.47	13003601.51	0.0069	0.0067
Mercury	30890-10-15 23:31 G	13003689.43	13003689.48	13003689.57	0.0070	0.0058
Mercury	30891-01-12 00:14 G	13003777.43	13003777.51	13003777.62	0.0070	0.0048
Mercury	30891-04-10 00:57 G	13003865.44	13003865.54	13003865.65	0.0070	0.0038
Mercury	30891-07-07 01:26 G	13003953.45	13003953.56	13003953.69	0.0070	0.0028
Mercury	30891-10-03 02:09 G	13004041.46	13004041.59	13004041.72	0.0070	0.0018

Mercury	30891-12-30 02:38 G	13004129.48	13004129.61	13004129.74	0.0070	0.0008
Mercury	30892-03-27 03:21 G	13004217.51	13004217.64	13004217.77	0.0070	0.0003
Mercury	30892-06-23 03:50 G	13004305.53	13004305.66	13004305.79	0.0070	0.0012
Mercury	30892-09-19 04:19 G	13004393.56	13004393.68	13004393.81	0.0070	0.0022
Mercury	30892-12-16 04:48 G	13004481.59	13004481.70	13004481.82	0.0071	0.0033
Mercury	30893-03-14 05:31 G	13004569.63	13004569.73	13004569.84	0.0071	0.0043
Mercury	30893-06-10 06:00 G	13004657.67	13004657.75	13004657.84	0.0071	0.0053
Mercury	30893-09-06 06:29 G	13004745.73	13004745.77	13004745.84	0.0071	0.0064
Moon	30967-08-15 10:05 G	13031750.69	13031750.92	13031751.17	0.0079	0.0034
Earth	30967-08-15 12:00 G	13031750.78	13031751.00	13031751.25	0.0079	0.0032 *
Venus	30968-07-28 03:07 G	13032098.44	13032098.63	13032098.84	0.0079	0.0033
Venus	30969-03-10 12:29 G	13032323.87	13032324.02	13032324.22	0.0078	0.0049
Mercury	30976-08-27 06:29 G	13035050.68	13035050.77	13035050.91	0.0074	0.0062
Mercury	30976-11-23 09:07 G	13035138.74	13035138.88	13035139.07	0.0074	0.0044
Mercury	30977-02-19 12:00 G	13035226.83	13035227.00	13035227.20	0.0074	0.0025
Mercury	30977-05-18 14:53 G	13035314.92	13035315.12	13035315.32	0.0074	0.0007
Mercury	30977-08-14 17:17 G	13035403.03	13035403.22	13035403.43	0.0074	0.0012
Mercury	30977-11-10 20:09 G	13035491.16	13035491.34	13035491.52	0.0074	0.0029
Mercury	30978-02-06 22:33 G	13035579.30	13035579.44	13035579.60	0.0074	0.0047
Mercury	30978-05-06 00:57 G	13035667.46	13035667.54	13035667.65	0.0074	0.0065

# 32ND MILLENNIUM CE

This is a list of transits visible from Pluto in the 32nd millennium CE.

PLANET	MAX- TRANSIT	C	START	MAX	END	SUNRAD	DEPTH	S
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TIME

Earth	31126-02-16 12:57 G	13089643.82	13089644.04	13089644.31	0.0065	0.0025
Moon	31126-02-16 16:05 G	13089643.96	13089644.17	13089644.42	0.0065	0.0028 *
Venus	31126-12-27 22:33 G	13089958.36	13089958.44	13089958.57	0.0065	0.0058
Moon	31127-02-17 22:19 G	13090010.40	13090010.43	13090010.52	0.0065	0.0064
Earth	31127-02-18 02:38 G	13090010.51	13090010.61	13090010.72	0.0065	0.0060 *
Venus	31127-08-10 03:21 G	13090183.43	13090183.64	13090183.86	0.0065	0.0012
Venus	31128-03-22 07:26 G	13090408.64	13090408.81	13090409.01	0.0066	0.0035
Mercury	31137-03-08 12:43 G	13093681.98	13093682.03	13093682.08	0.0069	0.0064
Mercury	31137-06-04 12:57 G	13093769.97	13093770.04	13093770.13	0.0070	0.0055
Mercury	31137-08-31 13:41 G	13093857.98	13093858.07	13093858.17	0.0070	0.0045
Mercury	31137-11-27 14:09 G	13093945.99	13093946.09	13093946.21	0.0070	0.0035
Mercury	31138-02-23 14:53 G	13094034.00	13094034.12	13094034.24	0.0070	0.0025
Mercury	31138-05-22 15:21 G	13094122.02	13094122.14	13094122.27	0.0070	0.0015
Mercury	31138-08-18 16:05 G	13094210.04	13094210.17	13094210.30	0.0070	0.0005
Mercury	31138-11-14 16:33 G	13094298.06	13094298.19	13094298.32	0.0070	0.0005
Mercury	31139-02-10 17:02 G	13094386.09	13094386.21	13094386.34	0.0070	0.0016
Mercury	31139-05-09 17:45 G	13094474.12	13094474.24	13094474.36	0.0070	0.0025
Mercury	31139-08-05 18:14 G	13094562.15	13094562.26	13094562.38	0.0071	0.0036
Mercury	31139-11-01 18:57 G	13094650.19	13094650.29	13094650.39	0.0071	0.0046
Mercury	31140-01-28 19:12 G	13094738.24	13094738.30	13094738.39	0.0071	0.0057
Mercury	31140-04-25 19:55 G	13094826.30	13094826.33	13094826.38	0.0071	0.0067
Moon	31214-08-19 16:05 G	13121969.94	13121970.17	13121970.42	0.0079	0.0033
Earth	31214-08-19 16:19 G	13121969.95	13121970.18	13121970.42	0.0079	0.0029 *
Venus	31215-04-10 07:12 G	13122203.58	13122203.80	13122204.02	0.0079	0.0005
Venus	31215-11-21 16:48 G	13122429.15	13122429.20	13122429.26	0.0078	0.0076
Mercury	31223-01-17 15:50 G	13125043.13	13125043.16	13125043.24	0.0075	0.0072
Mercury	31223-04-15 18:57 G	13125131.16	13125131.29	13125131.44	0.0074	0.0053
Mercury	31223-07-12 21:36 G	13125219.23	13125219.40	13125219.58	0.0074	0.0034

Mercury	31223-10-09 00:14 G	13125307.32	13125307.51	13125307.71	0.0074	0.0016
Mercury	31224-01-05 03:07 G	13125395.43	13125395.63	13125395.83	0.0074	0.0002
Mercury	31224-04-02 05:31 G	13125483.54	13125483.73	13125483.93	0.0074	0.0020
Mercury	31224-06-29 07:55 G	13125571.67	13125571.83	13125572.01	0.0074	0.0038
Mercury	31224-09-25 10:19 G	13125659.82	13125659.93	13125660.08	0.0074	0.0056
Mercury	31224-12-22 12:57 G	13125748.04	13125748.04	13125748.07	0.0074	0.0073
Earth	31373-02-19 12:29 G	13179862.77	13179863.02	13179863.28	0.0065	0.0014
Moon	31373-02-19 13:55 G	13179862.85	13179863.08	13179863.34	0.0065	0.0017 *
Venus	31373-09-08 02:53 G	13180063.45	13180063.62	13180063.83	0.0065	0.0033
Venus	31374-04-21 07:41 G	13180288.60	13180288.82	13180289.03	0.0066	0.0013
Venus	31374-12-02 11:31 G	13180513.92	13180513.98	13180514.10	0.0066	0.0060
Mercury	31383-07-29 02:09 G	13183674.55	13183674.59	13183674.63	0.0069	0.0066
Mercury	31383-10-25 02:24 G	13183762.53	13183762.60	13183762.68	0.0070	0.0056
Mercury	31384-01-21 02:53 G	13183850.54	13183850.62	13183850.73	0.0070	0.0047
Mercury	31384-04-18 03:36 G	13183938.55	13183938.65	13183938.77	0.0070	0.0037
Mercury	31384-07-15 04:05 G	13184026.56	13184026.67	13184026.80	0.0070	0.0027
Mercury	31384-10-11 04:48 G	13184114.57	13184114.70	13184114.83	0.0070	0.0017
Mercury	31385-01-07 05:17 G	13184202.59	13184202.72	13184202.85	0.0070	0.0007
Mercury	31385-04-05 06:00 G	13184290.62	13184290.75	13184290.88	0.0070	0.0003
Mercury	31385-07-02 06:29 G	13184378.64	13184378.77	13184378.90	0.0070	0.0013
Mercury	31385-09-28 06:57 G	13184466.67	13184466.79	13184466.92	0.0070	0.0024
Mercury	31385-12-25 07:41 G	13184554.71	13184554.82	13184554.93	0.0071	0.0034
Mercury	31386-03-23 08:09 G	13184642.74	13184642.84	13184642.95	0.0071	0.0044
Mercury	31386-06-19 08:38 G	13184730.79	13184730.86	13184730.95	0.0071	0.0055
Mercury	31386-09-15 09:21 G	13184818.85	13184818.89	13184818.94	0.0071	0.0065
Moon	31460-08-21 16:19 G	13211821.99	13211822.18	13211822.39	0.0079	0.0049
Earth	31460-08-21 19:26 G	13211822.13	13211822.31	13211822.52	0.0079	0.0052 *
Venus	31461-05-10 02:53 G	13212083.46	13212083.62	13212083.81	0.0079	0.0049
Venus	31461-12-21 12:43 G	13212308.84	13212309.03	13212309.24	0.0079	0.0033
Mercury	31469-09-05 05:17 G	13215123.61	13215123.72	13215123.86	0.0074	0.0058



Mercury	31469-12-02 07:55 G	13215211.67	13215211.83	13215212.01	0.0074	0.0039
Mercury	31470-02-28 10:33 G	13215299.76	13215299.94	13215300.14	0.0074	0.0021
Mercury	31470-05-27 13:26 G	13215387.86	13215388.06	13215388.26	0.0074	0.0003
Mercury	31470-08-23 15:50 G	13215475.97	13215476.16	13215476.36	0.0074	0.0015
Mercury	31470-11-19 18:29 G	13215564.10	13215564.27	13215564.45	0.0074	0.0033
Mercury	31471-02-15 20:53 G	13215652.24	13215652.37	13215652.53	0.0074	0.0051
Mercury	31471-05-14 23:17 G	13215740.42	13215740.47	13215740.56	0.0074	0.0069
Earth	31619-02-22 23:45 G	13269715.27	13269715.49	13269715.75	0.0065	0.0027
Moon	31619-02-23 02:09 G	13269715.37	13269715.59	13269715.86	0.0065	0.0025 *
Venus	31619-10-09 04:05 G	13269943.54	13269943.67	13269943.82	0.0065	0.0050
Earth	31620-02-24 13:26 G	13270081.95	13270082.06	13270082.19	0.0065	0.0058
Moon	31620-02-24 12:57 G	13270081.95	13270082.04	13270082.18	0.0065	0.0058 *
Venus	31620-05-21 08:24 G	13270168.64	13270168.85	13270169.08	0.0065	0.0004
Venus	31621-01-01 12:29 G	13270393.87	13270394.02	13270394.21	0.0066	0.0043
Mercury	31629-12-18 15:21 G	13273667.12	13273667.14	13273667.20	0.0069	0.0066
Mercury	31630-03-16 16:05 G	13273755.10	13273755.17	13273755.26	0.0070	0.0056
Mercury	31630-06-12 16:48 G	13273843.11	13273843.20	13273843.30	0.0070	0.0046
Mercury	31630-09-08 17:17 G	13273931.12	13273931.22	13273931.34	0.0070	0.0036
Mercury	31630-12-05 18:00 G	13274019.13	13274019.25	13274019.37	0.0070	0.0026
Mercury	31631-03-03 18:29 G	13274107.15	13274107.27	13274107.40	0.0070	0.0016
Mercury	31631-05-30 19:12 G	13274195.17	13274195.30	13274195.43	0.0070	0.0006
Mercury	31631-08-26 19:41 G	13274283.19	13274283.32	13274283.45	0.0070	0.0004
Mercury	31631-11-22 20:09 G	13274371.22	13274371.34	13274371.47	0.0070	0.0014
Mercury	31632-02-18 20:38 G	13274459.25	13274459.36	13274459.49	0.0070	0.0025
Mercury	31632-05-16 21:21 G	13274547.28	13274547.39	13274547.50	0.0071	0.0035
Mercury	31632-08-12 21:50 G	13274635.32	13274635.41	13274635.51	0.0071	0.0045
Mercury	31632-11-08 22:19 G	13274723.36	13274723.43	13274723.52	0.0071	0.0056
Mercury	31633-02-04 22:48 G	13274811.42	13274811.45	13274811.51	0.0071	0.0066
Venus	31707-06-10 01:55 G	13301963.58	13301963.58	13301963.60	0.0079	0.0079
Moon	31707-08-27 03:36 G	13302041.44	13302041.65	13302041.90	0.0079	0.0037

Earth	31707-08-27 07:55 G	13302041.60	13302041.83	13302042.05	0.0079	0.0037	*
Venus	31708-01-21 12:00 G	13302188.78	13302189.00	13302189.22	0.0079	0.0003	
Mercury	31715-10-30 14:24 G	13305028.08	13305028.10	13305028.17	0.0075	0.0073	
Mercury	31716-01-26 17:31 G	13305116.10	13305116.23	13305116.38	0.0075	0.0054	
Mercury	31716-04-23 19:55 G	13305204.17	13305204.33	13305204.52	0.0074	0.0036	
Mercury	31716-07-20 22:48 G	13305292.26	13305292.45	13305292.65	0.0074	0.0017	
Mercury	31716-10-17 01:41 G	13305380.37	13305380.57	13305380.77	0.0074	0.0002	
Mercury	31717-01-13 03:50 G	13305468.48	13305468.66	13305468.87	0.0074	0.0020	
Mercury	31717-04-11 06:14 G	13305556.61	13305556.76	13305556.95	0.0074	0.0038	
Mercury	31717-07-08 08:53 G	13305644.76	13305644.87	13305645.02	0.0074	0.0056	
Mercury	31717-10-04 11:45 G	13305732.97	13305732.99	13305733.02	0.0074	0.0073	
Moon	31865-02-25 12:57 G	13359567.91	13359568.04	13359568.18	0.0065	0.0055	
Earth	31865-02-25 16:19 G	13359568.06	13359568.18	13359568.33	0.0065	0.0055	*
Venus	31865-11-08 07:26 G	13359823.73	13359823.81	13359823.95	0.0065	0.0056	
Earth	31866-02-27 05:02 G	13359934.50	13359934.71	13359934.97	0.0065	0.0030	
Moon	31866-02-27 08:38 G	13359934.65	13359934.86	13359935.12	0.0065	0.0031	*
Venus	31866-06-21 12:00 G	13360048.80	13360049.00	13360049.23	0.0065	0.0011	
Venus	31867-02-01 16:19 G	13360274.01	13360274.18	13360274.38	0.0066	0.0036	
Mercury	31876-02-12 05:31 G	13363571.73	13363571.73	13363571.76	0.0069	0.0069	
Mercury	31876-05-10 06:14 G	13363659.70	13363659.76	13363659.83	0.0070	0.0059	
Mercury	31876-08-06 06:57 G	13363747.70	13363747.79	13363747.88	0.0070	0.0049	
Mercury	31876-11-02 07:26 G	13363835.70	13363835.81	13363835.92	0.0070	0.0039	
Mercury	31877-01-29 07:41 G	13363923.71	13363923.82	13363923.95	0.0070	0.0030	
Mercury	31877-04-27 08:24 G	13364011.73	13364011.85	13364011.98	0.0070	0.0020	
Mercury	31877-07-24 09:07 G	13364099.75	13364099.88	13364100.01	0.0070	0.0009	
Mercury	31877-10-20 09:36 G	13364187.77	13364187.90	13364188.03	0.0070	0.0001	
Mercury	31878-01-16 10:05 G	13364275.80	13364275.92	13364276.05	0.0070	0.0011	
Mercury	31878-04-14 10:33 G	13364363.82	13364363.94	13364364.07	0.0070	0.0022	
Mercury	31878-07-11 11:02 G	13364451.86	13364451.96	13364452.09	0.0071	0.0032	
Mercury	31878-10-07 11:45 G	13364539.89	13364539.99	13364540.10	0.0071	0.0042	

Mercury	31879-01-03 12:29 G	13364627.93	13364628.02	13364628.11	0.0071	0.0052
Mercury	31879-04-01 12:43 G	13364715.99	13364716.03	13364716.10	0.0071	0.0063
Mars	31948-12-16 20:24 G	13390177.27	13390177.35	13390177.51	0.0082	0.0077
Earth	31953-08-29 20:53 G	13391894.12	13391894.37	13391894.63	0.0079	0.0014
Moon	31953-08-29 21:50 G	13391894.17	13391894.41	13391894.66	0.0079	0.0011 *
Venus	31954-02-20 13:41 G	13392068.86	13392069.07	13392069.29	0.0079	0.0014
Venus	31954-10-03 23:17 G	13392294.36	13392294.47	13392294.59	0.0079	0.0067
Mercury	31962-03-22 04:05 G	13395020.57	13395020.67	13395020.79	0.0075	0.0062
Mercury	31962-06-18 06:29 G	13395108.63	13395108.77	13395108.95	0.0074	0.0044
Mercury	31962-09-14 09:36 G	13395196.71	13395196.90	13395197.09	0.0074	0.0025
Mercury	31962-12-11 12:14 G	13395284.81	13395285.01	13395285.21	0.0074	0.0006
Mercury	31963-03-09 14:38 G	13395372.92	13395373.11	13395373.32	0.0074	0.0012
Mercury	31963-06-05 17:17 G	13395461.04	13395461.22	13395461.41	0.0074	0.0030
Mercury	31963-09-01 19:41 G	13395549.18	13395549.32	13395549.49	0.0074	0.0048
Mercury	31963-11-28 22:05 G	13395637.35	13395637.42	13395637.53	0.0074	0.0066

# 33RD MILLENNIUM CE

This is a list of transits visible from Pluto in the 33rd millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	32111-12-09 12:14 G	13449703.94	13449704.01	13449704.14	0.0065	0.0059		
Moon	32112-03-01 21:07 G	13449787.12	13449787.38	13449787.65	0.0065	0.0007		
Earth	32112-03-01 23:31 G	13449787.23	13449787.48	13449787.75	0.0065	0.0005 *		

Venus	32112-07-21 17:02 G	13449929.00	13449929.21	13449929.43	0.0065	0.0013
Venus	32113-03-03 21:07 G	13450154.21	13450154.38	13450154.58	0.0066	0.0034
Mercury	32122-07-04 20:38 G	13453564.29	13453564.36	13453564.42	0.0070	0.0060
Mercury	32122-09-30 20:53 G	13453652.29	13453652.37	13453652.47	0.0070	0.0050
Mercury	32122-12-27 21:21 G	13453740.30	13453740.39	13453740.51	0.0070	0.0041
Mercury	32123-03-25 22:05 G	13453828.31	13453828.42	13453828.54	0.0070	0.0031
Mercury	32123-06-21 22:33 G	13453916.32	13453916.44	13453916.57	0.0070	0.0021
Mercury	32123-09-17 23:17 G	13454004.34	13454004.47	13454004.60	0.0070	0.0011
Mercury	32123-12-14 23:45 G	13454092.36	13454092.49	13454092.63	0.0070	0.0003
Mercury	32124-03-12 00:14 G	13454180.39	13454180.51	13454180.65	0.0070	0.0011
Mercury	32124-06-08 00:57 G	13454268.42	13454268.54	13454268.67	0.0070	0.0020
Mercury	32124-09-04 01:26 G	13454356.45	13454356.56	13454356.68	0.0071	0.0031
Mercury	32124-12-01 01:55 G	13454444.48	13454444.58	13454444.70	0.0071	0.0041
Mercury	32125-02-27 02:38 G	13454532.53	13454532.61	13454532.70	0.0071	0.0051
Mercury	32125-05-26 02:53 G	13454620.58	13454620.62	13454620.70	0.0071	0.0062
Mars	32195-05-10 15:50 G	13480171.81	13480172.16	13480172.52	0.0082	0.0002
Earth	32199-09-01 13:26 G	13481746.88	13481747.06	13481747.28	0.0079	0.0049
Moon	32199-09-01 16:33 G	13481747.00	13481747.19	13481747.43	0.0079	0.0046 *
Venus	32200-03-22 17:31 G	13481949.03	13481949.23	13481949.46	0.0079	0.0020
Venus	32200-11-03 03:07 G	13482174.52	13482174.63	13482174.78	0.0079	0.0063
Mercury	32208-05-15 15:36 G	13484925.07	13484925.15	13484925.28	0.0075	0.0063
Mercury	32208-08-11 18:29 G	13485013.12	13485013.27	13485013.45	0.0074	0.0044
Mercury	32208-11-07 21:07 G	13485101.21	13485101.38	13485101.58	0.0074	0.0026
Mercury	32209-02-04 00:00 G	13485189.31	13485189.50	13485189.70	0.0074	0.0007
Mercury	32209-05-03 02:38 G	13485277.42	13485277.61	13485277.81	0.0074	0.0012
Mercury	32209-07-30 05:02 G	13485365.54	13485365.71	13485365.91	0.0074	0.0030
Mercury	32209-10-26 07:41 G	13485453.68	13485453.82	13485453.98	0.0074	0.0048
Mercury	32210-01-22 10:05 G	13485541.85	13485541.92	13485542.03	0.0074	0.0066
Mars	32350-07-17 04:19 G	13536851.46	13536851.68	13536851.93	0.0063	0.0035
Venus	32358-01-08 20:09 G	13539584.21	13539584.34	13539584.49	0.0065	0.0049

Moon	32358-03-05 19:55 G	13539640.08	13539640.33	13539640.58	0.0065	0.0004
Earth	32358-03-05 21:50 G	13539640.16	13539640.41	13539640.68	0.0065	0.0008 *
Venus	32358-08-22 00:29 G	13539809.31	13539809.52	13539809.75	0.0065	0.0004
Venus	32359-04-04 04:19 G	13540034.54	13540034.68	13540034.87	0.0066	0.0043
Mercury	32368-06-01 10:33 G	13543380.91	13543380.94	13543381.00	0.0069	0.0066
Mercury	32368-08-28 11:17 G	13543468.90	13543468.97	13543469.06	0.0070	0.0056
Mercury	32368-11-24 11:45 G	13543556.91	13543556.99	13543557.10	0.0070	0.0046
Mercury	32369-02-20 12:29 G	13543644.91	13543645.02	13543645.14	0.0070	0.0036
Mercury	32369-05-19 12:57 G	13543732.93	13543733.04	13543733.17	0.0070	0.0026
Mercury	32369-08-15 13:41 G	13543820.94	13543821.07	13543821.20	0.0070	0.0016
Mercury	32369-11-11 14:09 G	13543908.96	13543909.09	13543909.23	0.0070	0.0006
Mercury	32370-02-07 14:53 G	13543996.99	13543997.12	13543997.25	0.0070	0.0005
Mercury	32370-05-06 15:21 G	13544085.01	13544085.14	13544085.27	0.0070	0.0015
Mercury	32370-08-02 15:50 G	13544173.04	13544173.16	13544173.29	0.0070	0.0025
Mercury	32370-10-29 16:19 G	13544261.08	13544261.18	13544261.30	0.0071	0.0036
Mercury	32371-01-25 17:02 G	13544349.12	13544349.21	13544349.31	0.0071	0.0046
Mercury	32371-04-23 17:45 G	13544437.16	13544437.24	13544437.32	0.0071	0.0056
Mercury	32371-07-20 18:00 G	13544525.22	13544525.25	13544525.30	0.0071	0.0067
Moon	32445-09-04 08:38 G	13571599.72	13571599.86	13571600.03	0.0079	0.0064
Earth	32445-09-04 11:45 G	13571599.86	13571599.99	13571600.13	0.0079	0.0068 *
Venus	32446-04-22 00:57 G	13571829.32	13571829.54	13571829.76	0.0079	0.0009
Venus	32446-12-03 10:05 G	13572054.87	13572054.92	13572055.03	0.0079	0.0073
Mercury	32454-04-12 02:53 G	13574741.59	13574741.62	13574741.67	0.0075	0.0073
Mercury	32454-07-09 05:17 G	13574829.61	13574829.72	13574829.88	0.0075	0.0055
Mercury	32454-10-05 08:09 G	13574917.68	13574917.84	13574918.03	0.0074	0.0036
Mercury	32455-01-01 10:48 G	13575005.77	13575005.95	13575006.15	0.0074	0.0017
Mercury	32455-03-30 13:41 G	13575093.87	13575094.07	13575094.27	0.0074	0.0001
Mercury	32455-06-26 16:19 G	13575181.99	13575182.18	13575182.37	0.0074	0.0020
Mercury	32455-09-22 18:29 G	13575270.11	13575270.27	13575270.46	0.0074	0.0038
Mercury	32455-12-19 20:53 G	13575358.26	13575358.37	13575358.52	0.0074	0.0056

Mercury	32456-03-16 23:45 G	13575446.49	13575446.49	13575446.51	0.0074	0.0074
Mars	32596-12-08 13:12 G	13626846.77	13626847.05	13626847.34	0.0063	0.0010
Venus	32604-02-09 03:36 G	13629464.49	13629464.65	13629464.84	0.0065	0.0040
Earth	32604-03-08 20:38 G	13629493.12	13629493.36	13629493.62	0.0065	0.0018
Moon	32604-03-09 00:00 G	13629493.26	13629493.50	13629493.76	0.0065	0.0014 *
Venus	32604-09-21 08:09 G	13629689.62	13629689.84	13629690.06	0.0065	0.0006
Moon	32605-03-10 06:29 G	13629859.77	13629859.77	13629859.82	0.0066	0.0065
Venus	32605-05-04 12:00 G	13629914.89	13629915.00	13629915.15	0.0066	0.0053
Mercury	32614-04-30 01:26 G	13633197.56	13633197.56	13633197.57	0.0069	0.0069
Mercury	32614-07-27 01:41 G	13633285.52	13633285.57	13633285.65	0.0070	0.0060
Mercury	32614-10-23 02:24 G	13633373.52	13633373.60	13633373.70	0.0070	0.0050
Mercury	32615-01-19 02:53 G	13633461.53	13633461.62	13633461.74	0.0070	0.0040
Mercury	32615-04-17 03:36 G	13633549.54	13633549.65	13633549.77	0.0070	0.0030
Mercury	32615-07-14 04:05 G	13633637.55	13633637.67	13633637.80	0.0070	0.0020
Mercury	32615-10-10 04:48 G	13633725.57	13633725.70	13633725.83	0.0070	0.0010
Mercury	32616-01-06 05:31 G	13633813.59	13633813.73	13633813.86	0.0070	0.0003
Mercury	32616-04-03 06:00 G	13633901.62	13633901.75	13633901.88	0.0070	0.0011
Mercury	32616-06-30 06:29 G	13633989.65	13633989.77	13633989.90	0.0070	0.0021
Mercury	32616-09-26 06:57 G	13634077.68	13634077.79	13634077.91	0.0071	0.0031
Mercury	32616-12-23 07:26 G	13634165.72	13634165.81	13634165.93	0.0071	0.0042
Mercury	32617-03-21 08:09 G	13634253.76	13634253.84	13634253.93	0.0071	0.0052
Mercury	32617-06-17 08:38 G	13634341.81	13634341.86	13634341.93	0.0071	0.0063
Moon	32691-09-08 10:48 G	13661452.89	13661452.95	13661453.06	0.0079	0.0075
Earth	32691-09-08 12:29 G	13661452.98	13661453.02	13661453.09	0.0079	0.0078 *
Venus	32691-10-09 23:45 G	13661484.42	13661484.49	13661484.58	0.0079	0.0074
Venus	32692-05-22 09:50 G	13661709.70	13661709.91	13661710.14	0.0079	0.0009
Moon	32692-09-09 15:21 G	13661820.03	13661820.14	13661820.27	0.0079	0.0070
Earth	32692-09-09 15:36 G	13661820.09	13661820.15	13661820.27	0.0079	0.0074 *
Mercury	32700-06-06 17:17 G	13664646.12	13664646.22	13664646.35	0.0075	0.0060
Mercury	32700-09-02 19:41 G	13664734.18	13664734.32	13664734.51	0.0075	0.0042

Mercury	32700-11-29 22:48 G	13664822.26	13664822.45	13664822.64	0.0074	0.0022
Mercury	32701-02-26 01:26 G	13664910.36	13664910.56	13664910.76	0.0074	0.0004
Mercury	32701-05-25 04:05 G	13664998.47	13664998.67	13664998.87	0.0074	0.0014
Mercury	32701-08-21 06:14 G	13665086.60	13665086.76	13665086.96	0.0074	0.0033
Mercury	32701-11-17 08:53 G	13665174.74	13665174.87	13665175.03	0.0074	0.0051
Mercury	32702-02-13 11:17 G	13665262.92	13665262.97	13665263.06	0.0074	0.0069
Venus	32850-03-10 13:55 G	13719344.89	13719345.08	13719345.31	0.0065	0.0021
Earth	32850-03-11 23:45 G	13719346.25	13719346.49	13719346.75	0.0065	0.0017
Moon	32850-03-12 00:14 G	13719346.25	13719346.51	13719346.78	0.0065	0.0015 *
Venus	32850-10-21 18:29 G	13719570.07	13719570.27	13719570.47	0.0065	0.0026
Mercury	32860-03-26 16:33 G	13723014.18	13723014.19	13723014.22	0.0069	0.0068
Mercury	32860-06-22 17:02 G	13723102.16	13723102.21	13723102.29	0.0070	0.0059
Mercury	32860-09-18 17:45 G	13723190.15	13723190.24	13723190.34	0.0070	0.0049
Mercury	32860-12-15 18:14 G	13723278.16	13723278.26	13723278.38	0.0070	0.0039
Mercury	32861-03-13 18:43 G	13723366.17	13723366.28	13723366.41	0.0070	0.0029
Mercury	32861-06-09 19:26 G	13723454.19	13723454.31	13723454.44	0.0070	0.0019
Mercury	32861-09-05 20:09 G	13723542.21	13723542.34	13723542.47	0.0070	0.0009
Mercury	32861-12-02 20:38 G	13723630.23	13723630.36	13723630.49	0.0070	0.0002
Mercury	32862-02-28 21:07 G	13723718.26	13723718.38	13723718.51	0.0070	0.0012
Mercury	32862-05-27 21:36 G	13723806.28	13723806.40	13723806.53	0.0070	0.0022
Mercury	32862-08-23 22:05 G	13723894.32	13723894.42	13723894.55	0.0071	0.0033
Mercury	32862-11-19 22:48 G	13723982.35	13723982.45	13723982.56	0.0071	0.0043
Mercury	32863-02-15 23:17 G	13724070.40	13724070.47	13724070.56	0.0071	0.0054
Mercury	32863-05-14 23:45 G	13724158.45	13724158.49	13724158.56	0.0071	0.0064
Earth	32937-09-11 17:45 G	13751306.15	13751306.24	13751306.35	0.0079	0.0073
Moon	32937-09-11 20:38 G	13751306.28	13751306.36	13751306.51	0.0079	0.0071 *
Venus	32937-11-09 11:31 G	13751364.80	13751364.98	13751365.17	0.0079	0.0043
Venus	32938-06-22 21:07 G	13751590.21	13751590.38	13751590.59	0.0079	0.0040
Moon	32938-09-13 17:31 G	13751673.18	13751673.23	13751673.31	0.0079	0.0076
Earth	32938-09-13 21:07 G	13751673.36	13751673.38	13751673.42	0.0079	0.0078

Mercury	32946-05-04 06:14 G	13754462.65	13754462.76	13754462.89	0.0075	0.0059
Mercury	32946-07-31 08:38 G	13754550.72	13754550.86	13754551.05	0.0075	0.0041
Mercury	32946-10-27 11:45 G	13754638.80	13754638.99	13754639.18	0.0074	0.0022
Mercury	32947-01-23 14:24 G	13754726.90	13754727.10	13754727.30	0.0074	0.0003
Mercury	32947-04-21 17:02 G	13754815.02	13754815.21	13754815.41	0.0074	0.0015
Mercury	32947-07-18 19:12 G	13754903.14	13754903.30	13754903.50	0.0074	0.0034
Mercury	32947-10-14 21:50 G	13754991.29	13754991.41	13754991.57	0.0074	0.0052
Mercury	32948-01-11 00:29 G	13755079.47	13755079.52	13755079.60	0.0074	0.0070

# 34TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 34th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	33095-08-28 19:12 G		13809000.18	13809000.30	13809000.47	0.0065	0.0048	
Moon	33096-03-14 22:19 G		13809199.19	13809199.43	13809199.69	0.0065	0.0018	
Earth	33096-03-15 01:41 G		13809199.34	13809199.57	13809199.84	0.0065	0.0020	*
Venus	33096-04-10 00:00 G		13809225.28	13809225.50	13809225.72	0.0065	0.0003	
Venus	33096-11-21 03:50 G		13809450.51	13809450.66	13809450.84	0.0066	0.0044	
Mercury	33106-02-23 07:41 G		13812830.81	13812830.82	13812830.84	0.0069	0.0069	
Mercury	33106-05-22 08:09 G		13812918.78	13812918.84	13812918.92	0.0069	0.0059	
Mercury	33106-08-18 08:53 G		13813006.78	13813006.87	13813006.96	0.0070	0.0049	
Mercury	33106-11-14 09:21 G		13813094.79	13813094.89	13813095.00	0.0070	0.0039	
Mercury	33107-02-10 09:50 G		13813182.80	13813182.91	13813183.04	0.0070	0.0029	



Mercury	33107-05-09 10:33 G	13813270.82	13813270.94	13813271.07	0.0070	0.0019
Mercury	33107-08-05 11:02 G	13813358.83	13813358.96	13813359.09	0.0070	0.0009
Mercury	33107-11-01 11:45 G	13813446.86	13813446.99	13813447.12	0.0070	0.0002
Mercury	33108-01-28 12:14 G	13813534.88	13813535.01	13813535.14	0.0070	0.0012
Mercury	33108-04-25 12:43 G	13813622.91	13813623.03	13813623.16	0.0070	0.0022
Mercury	33108-07-22 13:12 G	13813710.94	13813711.05	13813711.17	0.0070	0.0033
Mercury	33108-10-18 13:55 G	13813798.98	13813799.08	13813799.19	0.0071	0.0043
Mercury	33109-01-14 14:38 G	13813887.02	13813887.11	13813887.19	0.0071	0.0053
Mercury	33109-04-12 14:53 G	13813975.08	13813975.12	13813975.19	0.0071	0.0064
Mars	33179-01-19 16:05 G	13839458.89	13839459.17	13839459.47	0.0082	0.0046
Moon	33183-09-15 21:36 G	13841159.30	13841159.40	13841159.57	0.0079	0.0068
Earth	33183-09-15 22:05 G	13841159.32	13841159.42	13841159.57	0.0079	0.0069 *
Venus	33183-12-10 22:48 G	13841245.23	13841245.45	13841245.67	0.0079	0.0013
Venus	33184-07-23 08:24 G	13841470.76	13841470.85	13841470.97	0.0079	0.0069
Mercury	33192-03-31 19:12 G	13844279.19	13844279.30	13844279.44	0.0075	0.0058
Mercury	33192-06-27 22:05 G	13844367.25	13844367.42	13844367.59	0.0075	0.0039
Mercury	33192-09-24 00:29 G	13844455.34	13844455.52	13844455.72	0.0074	0.0021
Mercury	33192-12-21 03:21 G	13844543.44	13844543.64	13844543.84	0.0074	0.0002
Mercury	33193-03-19 05:45 G	13844631.56	13844631.74	13844631.94	0.0074	0.0017
Mercury	33193-06-15 08:24 G	13844719.68	13844719.85	13844720.03	0.0074	0.0035
Mercury	33193-09-11 11:02 G	13844807.83	13844807.96	13844808.10	0.0074	0.0053
Mercury	33193-12-08 13:12 G	13844896.03	13844896.05	13844896.12	0.0074	0.0072
Mars	33334-03-31 19:12 G	13896143.04	13896143.30	13896143.58	0.0063	0.0022
Venus	33341-09-28 06:57 G	13898880.58	13898880.79	13898880.99	0.0065	0.0024
Earth	33342-03-19 06:43 G	13899052.53	13899052.78	13899053.05	0.0065	0.0013
Moon	33342-03-19 08:09 G	13899052.60	13899052.84	13899053.10	0.0065	0.0013 *
Venus	33342-05-11 10:48 G	13899105.76	13899105.95	13899106.17	0.0065	0.0023
Mercury	33352-01-20 23:31 G	13902647.43	13902647.48	13902647.52	0.0069	0.0065
Mercury	33352-04-17 23:31 G	13902735.42	13902735.48	13902735.58	0.0070	0.0056
Mercury	33352-07-15 00:14 G	13902823.42	13902823.51	13902823.62	0.0070	0.0045

Mercury	33352-10-11 00:43 G	13902911.43	13902911.53	13902911.66	0.0070	0.0036
Mercury	33353-01-07 01:41 G	13902999.44	13902999.57	13902999.69	0.0070	0.0025
Mercury	33353-04-05 02:09 G	13903087.46	13903087.59	13903087.72	0.0070	0.0015
Mercury	33353-07-02 02:38 G	13903175.48	13903175.61	13903175.74	0.0070	0.0005
Mercury	33353-09-28 03:21 G	13903263.51	13903263.64	13903263.77	0.0070	0.0005
Mercury	33353-12-25 03:50 G	13903351.53	13903351.66	13903351.79	0.0070	0.0015
Mercury	33354-03-23 04:19 G	13903439.56	13903439.68	13903439.81	0.0070	0.0026
Mercury	33354-06-19 04:48 G	13903527.60	13903527.70	13903527.82	0.0071	0.0036
Mercury	33354-09-15 05:17 G	13903615.64	13903615.72	13903615.83	0.0071	0.0047
Mercury	33354-12-12 06:14 G	13903703.68	13903703.76	13903703.83	0.0071	0.0057
Mercury	33355-03-10 06:29 G	13903791.75	13903791.77	13903791.82	0.0071	0.0068
Venus	33429-05-30 01:26 G	13930900.43	13930900.56	13930900.74	0.0079	0.0058
Moon	33429-09-19 02:53 G	13931012.45	13931012.62	13931012.81	0.0079	0.0056
Earth	33429-09-19 05:45 G	13931012.58	13931012.74	13931012.95	0.0079	0.0056 *
Venus	33430-01-10 11:45 G	13931125.79	13931125.99	13931126.21	0.0079	0.0026
Mercury	33437-12-01 06:00 G	13934007.72	13934007.75	13934007.84	0.0075	0.0071
Mercury	33438-02-27 08:53 G	13934095.75	13934095.87	13934096.03	0.0075	0.0052
Mercury	33438-05-26 11:45 G	13934183.82	13934183.99	13934184.18	0.0075	0.0033
Mercury	33438-08-22 14:24 G	13934271.91	13934272.10	13934272.30	0.0074	0.0014
Mercury	33438-11-18 17:17 G	13934360.02	13934360.22	13934360.42	0.0074	0.0005
Mercury	33439-02-14 19:26 G	13934448.14	13934448.31	13934448.52	0.0074	0.0024
Mercury	33439-05-13 22:05 G	13934536.27	13934536.42	13934536.60	0.0074	0.0042
Mercury	33439-08-10 00:57 G	13934624.42	13934624.54	13934624.66	0.0074	0.0059
Mars	33580-08-24 11:17 G	13986138.75	13986138.97	13986139.20	0.0063	0.0039
Venus	33587-03-18 12:57 G	13988535.92	13988536.04	13988536.22	0.0065	0.0047
Venus	33587-10-29 17:31 G	13988761.02	13988761.23	13988761.46	0.0065	0.0003
Earth	33588-03-22 10:48 G	13988905.70	13988905.95	13988906.22	0.0065	0.0009
Moon	33588-03-22 13:26 G	13988905.81	13988906.06	13988906.34	0.0065	0.0011 *
Venus	33588-06-10 21:21 G	13988986.25	13988986.39	13988986.58	0.0065	0.0045
Mercury	33597-12-18 14:38 G	13992464.06	13992464.11	13992464.17	0.0069	0.0063

Mercury	33598-03-16 15:07 G	13992552.06	13992552.13	13992552.22	0.0070	0.0053
Mercury	33598-06-12 15:50 G	13992640.06	13992640.16	13992640.26	0.0070	0.0043
Mercury	33598-09-08 16:19 G	13992728.07	13992728.18	13992728.30	0.0070	0.0033
Mercury	33598-12-05 16:48 G	13992816.08	13992816.20	13992816.33	0.0070	0.0023
Mercury	33599-03-03 17:31 G	13992904.10	13992904.23	13992904.36	0.0070	0.0013
Mercury	33599-05-30 18:00 G	13992992.12	13992992.25	13992992.38	0.0070	0.0003
Mercury	33599-08-26 18:29 G	13993080.15	13993080.27	13993080.41	0.0070	0.0008
Mercury	33599-11-22 18:57 G	13993168.17	13993168.29	13993168.43	0.0070	0.0018
Mercury	33600-02-18 19:26 G	13993256.20	13993256.31	13993256.44	0.0070	0.0029
Mercury	33600-05-16 20:09 G	13993344.24	13993344.34	13993344.45	0.0071	0.0039
Mercury	33600-08-12 20:53 G	13993432.28	13993432.37	13993432.46	0.0071	0.0049
Mercury	33600-11-08 21:07 G	13993520.33	13993520.38	13993520.46	0.0071	0.0060
Mercury	33601-02-04 21:50 G	13993608.41	13993608.41	13993608.43	0.0071	0.0070
Venus	33675-06-29 14:09 G	14020780.88	14020781.09	14020781.31	0.0079	0.0023
Earth	33675-09-22 12:00 G	14020865.81	14020866.00	14020866.23	0.0079	0.0047
Moon	33675-09-22 14:09 G	14020865.90	14020866.09	14020866.30	0.0079	0.0049 *
Venus	33676-02-09 23:31 G	14021006.36	14021006.48	14021006.65	0.0079	0.0060
Mercury	33683-10-28 19:41 G	14023824.25	14023824.32	14023824.43	0.0075	0.0067
Mercury	33684-01-24 22:33 G	14023912.30	14023912.44	14023912.60	0.0075	0.0048
Mercury	33684-04-22 01:26 G	14024000.38	14024000.56	14024000.75	0.0075	0.0029
Mercury	33684-07-19 04:05 G	14024088.47	14024088.67	14024088.87	0.0074	0.0010
Mercury	33684-10-15 06:43 G	14024176.58	14024176.78	14024176.98	0.0074	0.0008
Mercury	33685-01-11 09:07 G	14024264.70	14024264.88	14024265.07	0.0074	0.0027
Mercury	33685-04-09 11:45 G	14024352.84	14024352.99	14024353.15	0.0074	0.0045
Mercury	33685-07-06 13:55 G	14024441.00	14024441.08	14024441.20	0.0074	0.0064
Venus	33832-09-04 21:50 G	14078191.37	14078191.41	14078191.51	0.0065	0.0062
Venus	33833-04-18 02:09 G	14078416.40	14078416.59	14078416.82	0.0065	0.0017
Venus	33833-11-29 06:14 G	14078641.58	14078641.76	14078641.98	0.0065	0.0030
Moon	33834-03-26 15:50 G	14078758.90	14078759.16	14078759.43	0.0065	0.0002
Earth	33834-03-26 18:43 G	14078759.02	14078759.28	14078759.54	0.0065	0.0004 *

Mercury	33843-08-20 06:00 G	14082192.72	14082192.75	14082192.80	0.0069	0.0066
Mercury	33843-11-16 06:43 G	14082280.71	14082280.78	14082280.86	0.0069	0.0056
Mercury	33844-02-12 07:12 G	14082368.71	14082368.80	14082368.90	0.0070	0.0046
Mercury	33844-05-10 07:41 G	14082456.72	14082456.82	14082456.94	0.0070	0.0036
Mercury	33844-08-06 08:24 G	14082544.73	14082544.85	14082544.97	0.0070	0.0026
Mercury	33844-11-02 08:53 G	14082632.75	14082632.87	14082633.00	0.0070	0.0016
Mercury	33845-01-29 09:36 G	14082720.77	14082720.90	14082721.03	0.0070	0.0005
Mercury	33845-04-27 10:05 G	14082808.79	14082808.92	14082809.05	0.0070	0.0005
Mercury	33845-07-24 10:33 G	14082896.82	14082896.94	14082897.07	0.0070	0.0015
Mercury	33845-10-20 11:02 G	14082984.85	14082984.96	14082985.09	0.0070	0.0026
Mercury	33846-01-16 11:45 G	14083072.88	14083072.99	14083073.10	0.0070	0.0036
Mercury	33846-04-14 12:14 G	14083160.92	14083161.01	14083161.11	0.0071	0.0046
Mercury	33846-07-11 12:43 G	14083248.96	14083249.03	14083249.12	0.0071	0.0057
Mercury	33846-10-07 13:12 G	14083337.03	14083337.05	14083337.10	0.0071	0.0068
Venus	33920-12-17 19:26 G	14110436.17	14110436.31	14110436.48	0.0079	0.0057
Venus	33921-07-31 05:45 G	14110661.54	14110661.74	14110661.95	0.0079	0.0026
Earth	33921-09-26 23:45 G	14110719.25	14110719.49	14110719.75	0.0079	0.0021
Moon	33921-09-27 02:09 G	14110719.35	14110719.59	14110719.85	0.0079	0.0024 *
Mercury	33929-06-30 08:09 G	14113552.83	14113552.84	14113552.88	0.0075	0.0074
Mercury	33929-09-26 10:48 G	14113640.83	14113640.95	14113641.10	0.0075	0.0055
Mercury	33929-12-23 13:41 G	14113728.90	14113729.07	14113729.25	0.0075	0.0036
Mercury	33930-03-21 16:05 G	14113816.99	14113817.17	14113817.38	0.0074	0.0018
Mercury	33930-06-17 18:57 G	14113905.09	14113905.29	14113905.49	0.0074	0.0002
Mercury	33930-09-13 21:21 G	14113993.21	14113993.39	14113993.59	0.0074	0.0020
Mercury	33930-12-11 00:14 G	14114081.34	14114081.51	14114081.68	0.0074	0.0038
Mercury	33931-03-09 02:24 G	14114169.49	14114169.60	14114169.75	0.0074	0.0057

# 35TH MILLENNIUM CE

**This is a list of transits visible from Pluto in the 35th millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mars	34071-07-22 15:21	G	14165439.90	14165440.14	14165440.41	0.0063	0.0029	
Venus	34078-10-05 10:05	G	14168071.75	14168071.92	14168072.12	0.0065	0.0035	
Venus	34079-05-18 14:24	G	14168296.89	14168297.10	14168297.32	0.0065	0.0010	
Venus	34079-12-29 18:57	G	14168522.18	14168522.29	14168522.40	0.0065	0.0056	
Moon	34080-03-28 23:31	G	14168612.24	14168612.48	14168612.73	0.0066	0.0011	
Earth	34080-03-29 00:29	G	14168612.28	14168612.52	14168612.79	0.0066	0.0014	*
Mercury	34089-07-16 21:50	G	14172009.36	14172009.41	14172009.48	0.0069	0.0061	
Mercury	34089-10-12 22:19	G	14172097.35	14172097.43	14172097.53	0.0069	0.0051	
Mercury	34090-01-08 23:02	G	14172185.36	14172185.46	14172185.57	0.0070	0.0041	
Mercury	34090-04-06 23:31	G	14172273.37	14172273.48	14172273.60	0.0070	0.0031	
Mercury	34090-07-04 00:00	G	14172361.38	14172361.50	14172361.63	0.0070	0.0021	
Mercury	34090-09-30 00:43	G	14172449.40	14172449.53	14172449.66	0.0070	0.0010	
Mercury	34090-12-27 01:26	G	14172537.42	14172537.56	14172537.69	0.0070	0.0002	
Mercury	34091-03-25 01:55	G	14172625.45	14172625.58	14172625.71	0.0070	0.0010	
Mercury	34091-06-21 02:24	G	14172713.48	14172713.60	14172713.73	0.0070	0.0020	
Mercury	34091-09-17 03:07	G	14172801.51	14172801.63	14172801.74	0.0070	0.0031	
Mercury	34091-12-14 03:21	G	14172889.55	14172889.64	14172889.76	0.0071	0.0042	
Mercury	34092-03-11 04:05	G	14172977.59	14172977.67	14172977.76	0.0071	0.0052	
Mercury	34092-06-07 04:19	G	14173065.64	14173065.68	14173065.76	0.0071	0.0063	
Mars	34162-10-02 12:29	G	14198748.97	14198749.02	14198749.16	0.0082	0.0079	
Venus	34167-01-17 10:05	G	14200316.71	14200316.92	14200317.14	0.0079	0.0013	
Venus	34167-08-30 19:41	G	14200542.24	14200542.32	14200542.44	0.0079	0.0070	

Moon	34167-09-30 06:29 G	14200572.51	14200572.77	14200573.04	0.0079	0.0006
Earth	34167-09-30 09:36 G	14200572.65	14200572.90	14200573.16	0.0079	0.0002 *
Mercury	34175-05-27 22:19 G	14203369.35	14203369.43	14203369.55	0.0075	0.0065
Mercury	34175-08-24 01:12 G	14203457.40	14203457.55	14203457.72	0.0075	0.0046
Mercury	34175-11-20 03:50 G	14203545.48	14203545.66	14203545.86	0.0075	0.0027
Mercury	34176-02-16 06:29 G	14203633.58	14203633.77	14203633.98	0.0074	0.0009
Mercury	34176-05-14 09:21 G	14203721.69	14203721.89	14203722.09	0.0074	0.0011
Mercury	34176-08-10 11:45 G	14203809.81	14203809.99	14203810.18	0.0074	0.0029
Mercury	34176-11-06 13:55 G	14203897.95	14203898.08	14203898.26	0.0074	0.0049
Mercury	34177-02-02 16:48 G	14203986.13	14203986.20	14203986.30	0.0074	0.0066
Mars	34317-12-16 13:26 G	14255435.88	14255436.06	14255436.27	0.0063	0.0046
Venus	34324-03-25 19:12 G	14257727.18	14257727.30	14257727.47	0.0065	0.0048
Venus	34324-11-05 23:45 G	14257952.28	14257952.49	14257952.72	0.0065	0.0003
Moon	34325-04-01 16:33 G	14258099.06	14258099.19	14258099.37	0.0065	0.0053
Earth	34325-04-01 20:09 G	14258099.21	14258099.34	14258099.48	0.0065	0.0056 *
Venus	34325-06-19 03:36 G	14258177.51	14258177.65	14258177.84	0.0065	0.0044
Earth	34326-04-03 09:21 G	14258465.67	14258465.89	14258466.13	0.0066	0.0030
Moon	34326-04-03 12:43 G	14258465.81	14258466.03	14258466.28	0.0066	0.0027 *
Mercury	34335-03-19 13:26 G	14261738.01	14261738.06	14261738.13	0.0069	0.0062
Mercury	34335-06-15 14:09 G	14261826.01	14261826.09	14261826.18	0.0070	0.0052
Mercury	34335-09-11 14:38 G	14261914.01	14261914.11	14261914.22	0.0070	0.0042
Mercury	34335-12-08 15:07 G	14262002.02	14262002.13	14262002.25	0.0070	0.0032
Mercury	34336-03-05 15:36 G	14262090.04	14262090.15	14262090.28	0.0070	0.0022
Mercury	34336-06-01 16:19 G	14262178.05	14262178.18	14262178.31	0.0070	0.0012
Mercury	34336-08-28 17:02 G	14262266.08	14262266.21	14262266.34	0.0070	0.0002
Mercury	34336-11-24 17:31 G	14262354.10	14262354.23	14262354.36	0.0070	0.0009
Mercury	34337-02-20 18:00 G	14262442.13	14262442.25	14262442.38	0.0070	0.0019
Mercury	34337-05-19 18:29 G	14262530.16	14262530.27	14262530.39	0.0070	0.0030
Mercury	34337-08-15 18:57 G	14262618.19	14262618.29	14262618.41	0.0070	0.0041
Mercury	34337-11-11 19:41 G	14262706.24	14262706.32	14262706.42	0.0071	0.0051

Mercury	34338-02-07 19:55 G	14262794.29	14262794.33	14262794.41	0.0071	0.0062
Venus	34412-07-06 16:33 G	14289972.01	14289972.19	14289972.40	0.0079	0.0040
Venus	34413-02-17 02:24 G	14290197.44	14290197.60	14290197.81	0.0079	0.0044
Moon	34413-10-03 22:05 G	14290426.19	14290426.42	14290426.66	0.0079	0.0028
Earth	34413-10-03 22:48 G	14290426.23	14290426.45	14290426.70	0.0079	0.0032 *
Mercury	34421-01-26 12:00 G	14293097.92	14293098.00	14293098.08	0.0075	0.0067
Mercury	34421-04-24 14:38 G	14293185.96	14293186.11	14293186.26	0.0075	0.0048
Mercury	34421-07-21 17:02 G	14293274.04	14293274.21	14293274.40	0.0075	0.0029
Mercury	34421-10-17 19:41 G	14293362.13	14293362.32	14293362.53	0.0074	0.0011
Mercury	34422-01-13 22:19 G	14293450.24	14293450.43	14293450.64	0.0074	0.0009
Mercury	34422-04-12 00:43 G	14293538.36	14293538.53	14293538.73	0.0074	0.0027
Mercury	34422-07-09 03:21 G	14293626.50	14293626.64	14293626.81	0.0074	0.0046
Mercury	34422-10-05 05:45 G	14293714.66	14293714.74	14293714.86	0.0074	0.0064
Venus	34569-09-12 03:50 G	14347382.66	14347382.66	14347382.68	0.0065	0.0065
Venus	34570-04-25 07:55 G	14347607.63	14347607.83	14347608.05	0.0065	0.0020
Venus	34570-12-06 12:00 G	14347832.81	14347833.00	14347833.21	0.0065	0.0025
Moon	34571-04-05 01:26 G	14347952.38	14347952.56	14347952.76	0.0065	0.0043
Earth	34571-04-05 02:24 G	14347952.43	14347952.60	14347952.80	0.0065	0.0046 *
Moon	34572-04-05 15:07 G	14348318.92	14348319.13	14348319.36	0.0066	0.0038
Earth	34572-04-05 15:36 G	14348318.97	14348319.15	14348319.38	0.0066	0.0041 *
Mercury	34580-11-17 04:33 G	14351466.67	14351466.69	14351466.74	0.0069	0.0067
Mercury	34581-02-13 05:17 G	14351554.66	14351554.72	14351554.80	0.0069	0.0056
Mercury	34581-05-12 05:45 G	14351642.66	14351642.74	14351642.85	0.0070	0.0047
Mercury	34581-08-08 06:14 G	14351730.66	14351730.76	14351730.89	0.0070	0.0037
Mercury	34581-11-04 07:12 G	14351818.68	14351818.80	14351818.92	0.0070	0.0026
Mercury	34582-01-31 07:41 G	14351906.69	14351906.82	14351906.95	0.0070	0.0016
Mercury	34582-04-29 08:09 G	14351994.71	14351994.84	14351994.97	0.0070	0.0006
Mercury	34582-07-26 08:53 G	14352082.74	14352082.87	14352083.00	0.0070	0.0005
Mercury	34582-10-22 09:07 G	14352170.76	14352170.88	14352171.02	0.0070	0.0016
Mercury	34583-01-18 09:50 G	14352258.79	14352258.91	14352259.04	0.0070	0.0025

Mercury	34583-04-16 10:19 G	14352346.83	14352346.93	14352347.05	0.0070	0.0036
Mercury	34583-07-13 10:48 G	14352434.86	14352434.95	14352435.06	0.0071	0.0046
Mercury	34583-10-09 11:17 G	14352522.91	14352522.97	14352523.06	0.0071	0.0057
Mercury	34584-01-05 12:14 G	14352610.97	14352611.01	14352611.05	0.0071	0.0067
Venus	34657-12-24 21:36 G	14379627.35	14379627.40	14379627.45	0.0080	0.0077
Venus	34658-08-07 07:41 G	14379852.60	14379852.82	14379853.05	0.0079	0.0007
Earth	34659-10-08 08:38 G	14380279.70	14380279.86	14380280.08	0.0079	0.0053
Moon	34659-10-08 12:14 G	14380279.83	14380280.01	14380280.23	0.0079	0.0050 *
Mercury	34666-12-25 02:24 G	14382914.48	14382914.60	14382914.74	0.0075	0.0057
Mercury	34667-03-23 05:17 G	14383002.55	14383002.72	14383002.89	0.0075	0.0038
Mercury	34667-06-19 07:55 G	14383090.64	14383090.83	14383091.02	0.0075	0.0019
Mercury	34667-09-15 10:33 G	14383178.74	14383178.94	14383179.14	0.0074	0.0000
Mercury	34667-12-12 13:12 G	14383266.86	14383267.05	14383267.24	0.0074	0.0019
Mercury	34668-03-09 15:36 G	14383354.99	14383355.15	14383355.33	0.0074	0.0037
Mercury	34668-06-05 17:45 G	14383443.14	14383443.24	14383443.40	0.0074	0.0056
Mars	34808-11-12 18:43 G	14434737.03	14434737.28	14434737.58	0.0063	0.0020
Venus	34815-10-13 17:17 G	14437263.04	14437263.22	14437263.41	0.0065	0.0033
Venus	34816-05-25 21:21 G	14437488.18	14437488.39	14437488.61	0.0065	0.0012
Venus	34817-01-06 01:12 G	14437713.47	14437713.55	14437713.68	0.0065	0.0058
Earth	34817-04-08 10:48 G	14437805.74	14437805.95	14437806.20	0.0065	0.0031
Moon	34817-04-08 14:24 G	14437805.89	14437806.10	14437806.36	0.0065	0.0029 *
Moon	34818-04-09 21:07 G	14438172.27	14438172.38	14438172.56	0.0066	0.0055
Earth	34818-04-10 00:43 G	14438172.41	14438172.53	14438172.68	0.0066	0.0056 *
Mercury	34826-07-19 20:09 G	14441195.34	14441195.34	14441195.38	0.0069	0.0069
Mercury	34826-10-15 20:53 G	14441283.31	14441283.37	14441283.45	0.0069	0.0058
Mercury	34827-01-11 21:21 G	14441371.31	14441371.39	14441371.50	0.0069	0.0049
Mercury	34827-04-09 22:19 G	14441459.32	14441459.43	14441459.54	0.0070	0.0038
Mercury	34827-07-06 22:48 G	14441547.33	14441547.45	14441547.57	0.0070	0.0028
Mercury	34827-10-02 23:17 G	14441635.35	14441635.47	14441635.60	0.0070	0.0018
Mercury	34827-12-29 23:45 G	14441723.37	14441723.49	14441723.63	0.0070	0.0008



Mercury	34828-03-27 00:29 G	14441811.39	14441811.52	14441811.65	0.0070	0.0003
Mercury	34828-06-23 00:57 G	14441899.41	14441899.54	14441899.67	0.0070	0.0013
Mercury	34828-09-19 01:26 G	14441987.44	14441987.56	14441987.69	0.0070	0.0024
Mercury	34828-12-16 01:55 G	14442075.48	14442075.58	14442075.70	0.0070	0.0034
Mercury	34829-03-14 02:38 G	14442163.51	14442163.61	14442163.71	0.0071	0.0045
Mercury	34829-06-10 03:21 G	14442251.56	14442251.64	14442251.72	0.0071	0.0055
Mercury	34829-09-06 03:36 G	14442339.62	14442339.65	14442339.71	0.0071	0.0066
Venus	34904-01-25 14:09 G	14469507.89	14469508.09	14469508.32	0.0079	0.0022
Venus	34904-09-07 00:14 G	14469733.38	14469733.51	14469733.66	0.0079	0.0062
Moon	34904-10-09 17:45 G	14469766.13	14469766.24	14469766.42	0.0079	0.0065
Earth	34904-10-09 18:57 G	14469766.18	14469766.29	14469766.46	0.0079	0.0067 *
Mercury	34912-08-25 14:53 G	14472643.03	14472643.12	14472643.26	0.0075	0.0061
Mercury	34912-11-21 17:45 G	14472731.09	14472731.24	14472731.42	0.0075	0.0042
Mercury	34913-02-17 20:24 G	14472819.17	14472819.35	14472819.55	0.0075	0.0023
Mercury	34913-05-16 23:17 G	14472907.27	14472907.47	14472907.67	0.0074	0.0004
Mercury	34913-08-13 01:41 G	14472995.39	14472995.57	14472995.78	0.0074	0.0016
Mercury	34913-11-09 04:05 G	14473083.51	14473083.67	14473083.87	0.0074	0.0035
Mercury	34914-02-05 06:57 G	14473171.66	14473171.79	14473171.94	0.0074	0.0052
Mercury	34914-05-04 09:07 G	14473259.85	14473259.88	14473259.96	0.0074	0.0071

# 36TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 36th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Mars	35055-04-08 10:48 G	14524732.79	14524732.95	14524733.18	0.0063	0.0046
Venus	35061-04-02 01:12 G	14526918.42	14526918.55	14526918.69	0.0065	0.0051
Venus	35061-11-13 05:17 G	14527143.51	14527143.72	14527143.94	0.0065	0.0007
Venus	35062-06-26 09:36 G	14527368.72	14527368.90	14527369.08	0.0065	0.0039
Moon	35063-04-12 17:02 G	14527658.96	14527659.21	14527659.47	0.0065	0.0020
Earth	35063-04-12 17:31 G	14527658.99	14527659.23	14527659.48	0.0065	0.0021 *
Mercury	35072-06-16 12:00 G	14531011.96	14531012.00	14531012.07	0.0069	0.0063
Mercury	35072-09-12 12:29 G	14531099.95	14531100.02	14531100.12	0.0069	0.0053
Mercury	35072-12-09 13:26 G	14531187.96	14531188.06	14531188.16	0.0070	0.0043
Mercury	35073-03-07 13:55 G	14531275.97	14531276.08	14531276.19	0.0070	0.0033
Mercury	35073-06-03 14:24 G	14531363.98	14531364.10	14531364.23	0.0070	0.0023
Mercury	35073-08-30 14:53 G	14531452.00	14531452.12	14531452.26	0.0070	0.0013
Mercury	35073-11-26 15:36 G	14531540.02	14531540.15	14531540.28	0.0070	0.0002
Mercury	35074-02-22 16:05 G	14531628.04	14531628.17	14531628.30	0.0070	0.0008
Mercury	35074-05-21 16:48 G	14531716.07	14531716.20	14531716.32	0.0070	0.0018
Mercury	35074-08-17 17:17 G	14531804.10	14531804.22	14531804.34	0.0070	0.0029
Mercury	35074-11-13 17:45 G	14531892.14	14531892.24	14531892.35	0.0070	0.0039
Mercury	35075-02-09 18:29 G	14531980.18	14531980.27	14531980.36	0.0071	0.0050
Mercury	35075-05-08 18:43 G	14532068.23	14532068.28	14532068.36	0.0071	0.0061
Venus	35149-07-14 17:45 G	14559163.13	14559163.24	14559163.40	0.0080	0.0063
Venus	35150-02-25 04:05 G	14559388.47	14559388.67	14559388.90	0.0079	0.0022
Earth	35150-10-14 03:50 G	14559619.48	14559619.66	14559619.89	0.0079	0.0048
Moon	35150-10-14 07:55 G	14559619.63	14559619.83	14559620.05	0.0079	0.0046 *
Mercury	35158-04-27 02:53 G	14562371.57	14562371.62	14562371.69	0.0075	0.0071
Mercury	35158-07-24 05:31 G	14562459.60	14562459.73	14562459.89	0.0075	0.0052
Mercury	35158-10-20 08:09 G	14562547.67	14562547.84	14562548.03	0.0075	0.0033
Mercury	35159-01-16 11:02 G	14562635.77	14562635.96	14562636.16	0.0075	0.0014
Mercury	35159-04-14 13:41 G	14562723.87	14562724.07	14562724.27	0.0074	0.0005
Mercury	35159-07-11 16:05 G	14562811.99	14562812.17	14562812.37	0.0074	0.0024

Mercury	35159-10-07 18:57 G	14562900.13	14562900.29	14562900.45	0.0074	0.0043
Mercury	35160-01-03 21:07 G	14562988.29	14562988.38	14562988.51	0.0074	0.0061
Venus	35306-09-20 10:19 G	14616573.93	14616573.93	14616573.95	0.0065	0.0065
Venus	35307-05-03 14:24 G	14616798.90	14616799.10	14616799.31	0.0065	0.0020
Venus	35307-12-14 18:14 G	14617024.07	14617024.26	14617024.48	0.0065	0.0025
Moon	35309-04-15 22:19 G	14617512.17	14617512.43	14617512.69	0.0066	0.0006
Earth	35309-04-16 01:41 G	14617512.32	14617512.57	14617512.83	0.0066	0.0006 *
Mercury	35318-02-16 03:50 G	14620740.62	14620740.66	14620740.71	0.0069	0.0065
Mercury	35318-05-15 04:19 G	14620828.61	14620828.68	14620828.76	0.0069	0.0055
Mercury	35318-08-11 05:02 G	14620916.61	14620916.71	14620916.81	0.0069	0.0045
Mercury	35318-11-07 05:31 G	14621004.62	14621004.73	14621004.84	0.0070	0.0035
Mercury	35319-02-03 06:00 G	14621092.63	14621092.75	14621092.88	0.0070	0.0025
Mercury	35319-05-02 06:29 G	14621180.65	14621180.77	14621180.90	0.0070	0.0015
Mercury	35319-07-29 07:12 G	14621268.67	14621268.80	14621268.93	0.0070	0.0004
Mercury	35319-10-25 07:41 G	14621356.69	14621356.82	14621356.95	0.0070	0.0006
Mercury	35320-01-21 08:24 G	14621444.72	14621444.85	14621444.97	0.0070	0.0017
Mercury	35320-04-18 08:38 G	14621532.75	14621532.86	14621532.99	0.0070	0.0027
Mercury	35320-07-15 09:07 G	14621620.78	14621620.88	14621621.00	0.0070	0.0038
Mercury	35320-10-11 09:50 G	14621708.82	14621708.91	14621709.01	0.0070	0.0048
Mercury	35321-01-07 10:19 G	14621796.87	14621796.93	14621797.01	0.0071	0.0059
Mercury	35321-04-05 10:48 G	14621884.94	14621884.95	14621884.99	0.0071	0.0070
Venus	35395-08-14 11:02 G	14649043.74	14649043.96	14649044.18	0.0080	0.0007
Venus	35396-03-26 20:24 G	14649269.31	14649269.35	14649269.44	0.0079	0.0076
Moon	35396-10-16 17:02 G	14649472.97	14649473.21	14649473.49	0.0079	0.0017
Earth	35396-10-16 17:31 G	14649472.98	14649473.23	14649473.49	0.0079	0.0016 *
Mercury	35403-12-27 15:50 G	14652100.16	14652100.16	14652100.19	0.0075	0.0075
Mercury	35404-03-24 18:57 G	14652188.16	14652188.29	14652188.42	0.0075	0.0055
Mercury	35404-06-20 21:36 G	14652276.22	14652276.40	14652276.57	0.0075	0.0036
Mercury	35404-09-17 00:00 G	14652364.31	14652364.50	14652364.70	0.0075	0.0017
Mercury	35404-12-14 02:38 G	14652452.42	14652452.61	14652452.81	0.0074	0.0003

Mercury	35405-03-12 05:17 G	14652540.53	14652540.72	14652540.92	0.0074	0.0021
Mercury	35405-06-08 07:41 G	14652628.66	14652628.82	14652629.00	0.0074	0.0040
Mercury	35405-09-04 10:05 G	14652716.82	14652716.92	14652717.06	0.0074	0.0058
Mars	35546-03-06 16:48 G	14704033.95	14704034.20	14704034.49	0.0063	0.0023
Venus	35552-10-20 22:19 G	14706454.27	14706454.43	14706454.62	0.0065	0.0038
Venus	35553-06-03 02:38 G	14706679.40	14706679.61	14706679.83	0.0065	0.0007
Venus	35554-01-14 06:29 G	14706904.66	14706904.77	14706904.92	0.0065	0.0052
Earth	35555-04-20 08:09 G	14707365.59	14707365.84	14707366.11	0.0066	0.0005
Moon	35555-04-20 10:19 G	14707365.68	14707365.93	14707366.18	0.0066	0.0003 *
Mercury	35564-01-14 19:26 G	14710557.26	14710557.31	14710557.39	0.0069	0.0060
Mercury	35564-04-11 20:09 G	14710645.25	14710645.34	14710645.44	0.0069	0.0049
Mercury	35564-07-08 20:38 G	14710733.26	14710733.36	14710733.47	0.0070	0.0039
Mercury	35564-10-04 21:07 G	14710821.27	14710821.38	14710821.51	0.0070	0.0030
Mercury	35564-12-31 21:50 G	14710909.29	14710909.41	14710909.54	0.0070	0.0019
Mercury	35565-03-29 22:19 G	14710997.31	14710997.43	14710997.57	0.0070	0.0009
Mercury	35565-06-25 23:02 G	14711085.33	14711085.46	14711085.59	0.0070	0.0002
Mercury	35565-09-21 23:31 G	14711173.35	14711173.48	14711173.61	0.0070	0.0012
Mercury	35565-12-19 00:00 G	14711261.38	14711261.50	14711261.63	0.0070	0.0022
Mercury	35566-03-17 00:43 G	14711349.41	14711349.53	14711349.64	0.0070	0.0033
Mercury	35566-06-13 00:57 G	14711437.45	14711437.54	14711437.65	0.0070	0.0044
Mercury	35566-09-09 01:41 G	14711525.49	14711525.57	14711525.66	0.0071	0.0054
Mercury	35566-12-06 02:09 G	14711613.55	14711613.59	14711613.65	0.0071	0.0065
Mars	35637-05-11 04:48 G	14737337.54	14737337.70	14737337.95	0.0082	0.0066
Venus	35641-01-31 14:38 G	14738698.96	14738699.11	14738699.31	0.0080	0.0049
Venus	35641-09-14 00:57 G	14738924.35	14738924.54	14738924.75	0.0079	0.0036
Moon	35642-10-20 23:31 G	14739326.22	14739326.48	14739326.73	0.0079	0.0001
Earth	35642-10-21 02:53 G	14739326.37	14739326.62	14739326.88	0.0079	0.0002 *
Mercury	35649-11-23 06:14 G	14741916.68	14741916.76	14741916.86	0.0075	0.0066
Mercury	35650-02-19 08:53 G	14742004.72	14742004.87	14742005.03	0.0075	0.0047
Mercury	35650-05-18 11:31 G	14742092.80	14742092.98	14742093.17	0.0075	0.0028

Mercury	35650-08-14 14:24 G	14742180.90	14742181.10	14742181.29	0.0075	0.0009
Mercury	35650-11-10 16:48 G	14742269.01	14742269.20	14742269.40	0.0074	0.0010
Mercury	35651-02-06 19:12 G	14742357.13	14742357.30	14742357.50	0.0074	0.0029
Mercury	35651-05-05 21:36 G	14742445.27	14742445.40	14742445.57	0.0074	0.0048
Mercury	35651-08-02 00:29 G	14742533.44	14742533.52	14742533.62	0.0074	0.0066
Mars	35792-07-29 13:12 G	14794029.87	14794030.05	14794030.27	0.0063	0.0045
Venus	35798-04-09 07:41 G	14796109.69	14796109.82	14796109.95	0.0065	0.0052
Venus	35798-11-20 11:31 G	14796334.77	14796334.98	14796335.21	0.0065	0.0008
Venus	35799-07-03 15:21 G	14796559.98	14796560.14	14796560.34	0.0065	0.0038
Earth	35801-04-23 16:05 G	14797218.94	14797219.17	14797219.44	0.0066	0.0019
Moon	35801-04-23 19:12 G	14797219.04	14797219.30	14797219.56	0.0066	0.0016 *
Mercury	35809-09-15 10:48 G	14800285.91	14800285.95	14800286.02	0.0069	0.0062
Mercury	35809-12-12 11:17 G	14800373.90	14800373.97	14800374.07	0.0069	0.0053
Mercury	35810-03-10 12:14 G	14800461.91	14800462.01	14800462.12	0.0069	0.0042
Mercury	35810-06-06 12:43 G	14800549.92	14800550.03	14800550.15	0.0070	0.0032
Mercury	35810-09-02 13:12 G	14800637.93	14800638.05	14800638.18	0.0070	0.0022
Mercury	35810-11-29 13:55 G	14800725.95	14800726.08	14800726.21	0.0070	0.0011
Mercury	35811-02-25 14:24 G	14800813.97	14800814.10	14800814.24	0.0070	0.0003
Mercury	35811-05-24 15:07 G	14800902.00	14800902.13	14800902.26	0.0070	0.0009
Mercury	35811-08-20 15:36 G	14800990.03	14800990.15	14800990.28	0.0070	0.0020
Mercury	35811-11-16 16:05 G	14801078.06	14801078.17	14801078.29	0.0070	0.0030
Mercury	35812-02-12 16:48 G	14801166.09	14801166.20	14801166.30	0.0070	0.0041
Mercury	35812-05-10 17:02 G	14801254.13	14801254.21	14801254.31	0.0070	0.0052
Mercury	35812-08-06 18:00 G	14801342.19	14801342.25	14801342.31	0.0071	0.0062
Venus	35886-07-21 21:07 G	14828354.35	14828354.38	14828354.43	0.0080	0.0078
Venus	35887-03-04 07:26 G	14828579.59	14828579.81	14828580.03	0.0080	0.0006
Earth	35888-10-24 15:07 G	14829179.92	14829180.13	14829180.39	0.0079	0.0033
Moon	35888-10-24 16:48 G	14829179.98	14829180.20	14829180.44	0.0079	0.0030 *
Mercury	35895-07-25 18:29 G	14831645.24	14831645.27	14831645.37	0.0075	0.0071
Mercury	35895-10-21 21:36 G	14831733.27	14831733.40	14831733.56	0.0075	0.0051

Mercury	35896-01-18 00:14 G	14831821.34	14831821.51	14831821.70	0.0075	0.0032
Mercury	35896-04-15 03:07 G	14831909.43	14831909.63	14831909.83	0.0075	0.0013
Mercury	35896-07-12 05:31 G	14831997.54	14831997.73	14831997.94	0.0074	0.0007
Mercury	35896-10-08 07:55 G	14832085.66	14832085.83	14832086.03	0.0074	0.0026
Mercury	35897-01-04 10:33 G	14832173.80	14832173.94	14832174.12	0.0074	0.0044
Mercury	35897-04-02 13:12 G	14832261.96	14832262.05	14832262.17	0.0074	0.0063

# 37TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 37th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	36044-05-09 18:43 G		14885990.10	14885990.28	14885990.50	0.0065	0.0028	
Venus	36044-12-20 23:02 G		14886215.26	14886215.46	14886215.68	0.0065	0.0017	
Venus	36045-08-03 02:53 G		14886440.58	14886440.62	14886440.70	0.0065	0.0063	
Earth	36046-04-25 07:55 G		14886705.74	14886705.83	14886705.95	0.0065	0.0060	
Moon	36046-04-25 09:07 G		14886705.80	14886705.88	14886706.04	0.0065	0.0058	*
Moon	36047-04-26 18:29 G		14887072.04	14887072.27	14887072.54	0.0066	0.0024	
Earth	36047-04-26 21:36 G		14887072.18	14887072.40	14887072.66	0.0066	0.0027	*
Mercury	36055-05-17 02:09 G		14890014.57	14890014.59	14890014.62	0.0069	0.0068	
Mercury	36055-08-13 02:38 G		14890102.55	14890102.61	14890102.69	0.0069	0.0058	
Mercury	36055-11-09 03:21 G		14890190.55	14890190.64	14890190.74	0.0069	0.0048	
Mercury	36056-02-05 03:50 G		14890278.55	14890278.66	14890278.77	0.0069	0.0038	
Mercury	36056-05-03 04:19 G		14890366.57	14890366.68	14890366.81	0.0070	0.0028	

Mercury	36056-07-30 04:48 G	14890454.58	14890454.70	14890454.83	0.0070	0.0018
Mercury	36056-10-26 05:31 G	14890542.60	14890542.73	14890542.86	0.0070	0.0007
Mercury	36057-01-22 06:00 G	14890630.62	14890630.75	14890630.88	0.0070	0.0004
Mercury	36057-04-20 06:29 G	14890718.65	14890718.77	14890718.91	0.0070	0.0014
Mercury	36057-07-17 07:12 G	14890806.68	14890806.80	14890806.92	0.0070	0.0024
Mercury	36057-10-13 07:26 G	14890894.71	14890894.81	14890894.94	0.0070	0.0035
Mercury	36058-01-09 08:09 G	14890982.75	14890982.84	14890982.95	0.0070	0.0045
Mercury	36058-04-07 08:53 G	14891070.79	14891070.87	14891070.95	0.0070	0.0056
Mercury	36058-07-04 09:21 G	14891158.86	14891158.89	14891158.94	0.0071	0.0067
Venus	36132-08-21 10:48 G	14918234.76	14918234.95	14918235.15	0.0080	0.0038
Venus	36133-04-03 20:24 G	14918460.19	14918460.35	14918460.55	0.0079	0.0046
Earth	36134-10-28 23:17 G	14919033.27	14919033.47	14919033.69	0.0079	0.0047
Moon	36134-10-29 01:55 G	14919033.38	14919033.58	14919033.82	0.0079	0.0044 *
Mercury	36141-06-22 09:07 G	14921461.79	14921461.88	14921461.99	0.0075	0.0063
Mercury	36141-09-18 11:45 G	14921549.84	14921549.99	14921550.16	0.0075	0.0044
Mercury	36141-12-15 14:24 G	14921637.92	14921638.10	14921638.30	0.0075	0.0025
Mercury	36142-03-13 17:02 G	14921726.02	14921726.21	14921726.42	0.0075	0.0006
Mercury	36142-06-09 19:41 G	14921814.13	14921814.32	14921814.52	0.0074	0.0013
Mercury	36142-09-05 22:05 G	14921902.25	14921902.42	14921902.61	0.0074	0.0033
Mercury	36142-12-03 00:29 G	14921990.40	14921990.52	14921990.68	0.0074	0.0051
Mercury	36143-03-01 02:53 G	14922078.58	14922078.62	14922078.71	0.0074	0.0070
Mars	36283-06-27 12:00 G	14973330.79	14973331.00	14973331.26	0.0062	0.0037
Venus	36289-10-28 02:09 G	14975645.47	14975645.59	14975645.77	0.0065	0.0048
Venus	36290-06-10 06:43 G	14975870.56	14975870.78	14975871.00	0.0065	0.0003
Venus	36291-01-21 10:19 G	14976095.79	14976095.93	14976096.12	0.0065	0.0042
Earth	36292-04-28 12:57 G	14976558.92	14976559.04	14976559.23	0.0066	0.0053
Moon	36292-04-28 15:21 G	14976559.00	14976559.14	14976559.35	0.0066	0.0050 *
Moon	36293-04-30 01:55 G	14976925.38	14976925.58	14976925.82	0.0066	0.0032
Earth	36293-04-30 02:53 G	14976925.43	14976925.62	14976925.87	0.0066	0.0035 *
Mercury	36301-04-14 17:45 G	14979831.20	14979831.24	14979831.30	0.0069	0.0063

Mercury	36301-07-11 18:14 G	14979919.19	14979919.26	14979919.35	0.0069	0.0053
Mercury	36301-10-07 18:43 G	14980007.19	14980007.28	14980007.39	0.0069	0.0044
Mercury	36302-01-03 19:26 G	14980095.20	14980095.31	14980095.43	0.0070	0.0033
Mercury	36302-04-01 20:09 G	14980183.22	14980183.34	14980183.46	0.0070	0.0023
Mercury	36302-06-28 20:38 G	14980271.23	14980271.36	14980271.49	0.0070	0.0013
Mercury	36302-09-24 21:07 G	14980359.25	14980359.38	14980359.52	0.0070	0.0003
Mercury	36302-12-21 21:50 G	14980447.28	14980447.41	14980447.54	0.0070	0.0008
Mercury	36303-03-19 22:05 G	14980535.31	14980535.42	14980535.56	0.0070	0.0020
Mercury	36303-06-15 22:48 G	14980623.34	14980623.45	14980623.57	0.0070	0.0029
Mercury	36303-09-11 23:31 G	14980711.37	14980711.48	14980711.59	0.0070	0.0040
Mercury	36303-12-08 23:45 G	14980799.41	14980799.49	14980799.59	0.0070	0.0051
Mercury	36304-03-06 00:29 G	14980887.46	14980887.52	14980887.59	0.0071	0.0061
Mars	36374-08-30 07:12 G	15006631.48	15006631.80	15006632.13	0.0082	0.0028
Venus	36378-02-08 14:38 G	15007890.08	15007890.11	15007890.18	0.0080	0.0078
Venus	36378-09-22 01:12 G	15008115.34	15008115.55	15008115.78	0.0080	0.0007
Moon	36380-11-01 06:00 G	15008886.60	15008886.75	15008886.92	0.0078	0.0063
Earth	36380-11-01 08:53 G	15008886.74	15008886.87	15008887.01	0.0078	0.0067 *
Mercury	36387-02-21 20:38 G	15011190.34	15011190.36	15011190.42	0.0075	0.0074
Mercury	36387-05-20 23:17 G	15011278.35	15011278.47	15011278.63	0.0075	0.0054
Mercury	36387-08-17 01:55 G	15011366.42	15011366.58	15011366.78	0.0075	0.0035
Mercury	36387-11-13 05:02 G	15011454.51	15011454.71	15011454.90	0.0075	0.0015
Mercury	36388-02-09 07:41 G	15011542.62	15011542.82	15011543.02	0.0075	0.0004
Mercury	36388-05-07 09:50 G	15011630.74	15011630.91	15011631.12	0.0074	0.0024
Mercury	36388-08-03 12:14 G	15011718.87	15011719.01	15011719.20	0.0074	0.0043
Mercury	36388-10-30 15:21 G	15011807.03	15011807.14	15011807.26	0.0074	0.0061
Mars	36529-11-20 02:09 G	15063326.31	15063326.59	15063326.88	0.0063	0.0013
Venus	36535-11-28 12:43 G	15065525.84	15065526.03	15065526.23	0.0065	0.0029
Venus	36536-07-10 16:48 G	15065750.99	15065751.20	15065751.42	0.0065	0.0015
Venus	36537-02-20 20:38 G	15065976.30	15065976.36	15065976.46	0.0065	0.0060
Moon	36538-05-02 12:57 G	15066411.89	15066412.04	15066412.23	0.0066	0.0050



Earth	36538-05-02 15:50 G	15066412.04	15066412.16	15066412.35	0.0066	0.0053	*
Earth	36539-05-04 05:45 G	15066778.54	15066778.74	15066778.98	0.0066	0.0035	
Moon	36539-05-04 09:21 G	15066778.68	15066778.89	15066779.14	0.0066	0.0032	*
Mercury	36547-03-12 08:38 G	15069647.83	15069647.86	15069647.93	0.0069	0.0064	
Mercury	36547-06-08 09:21 G	15069735.82	15069735.89	15069735.98	0.0069	0.0053	
Mercury	36547-09-04 10:05 G	15069823.82	15069823.92	15069824.03	0.0069	0.0043	
Mercury	36547-12-01 10:33 G	15069911.83	15069911.94	15069912.06	0.0069	0.0033	
Mercury	36548-02-27 11:02 G	15069999.84	15069999.96	15070000.09	0.0070	0.0023	
Mercury	36548-05-25 11:45 G	15070087.86	15070087.99	15070088.12	0.0070	0.0012	
Mercury	36548-08-21 12:14 G	15070175.88	15070176.01	15070176.15	0.0070	0.0003	
Mercury	36548-11-17 12:43 G	15070263.91	15070264.03	15070264.17	0.0070	0.0009	
Mercury	36549-02-13 13:26 G	15070351.93	15070352.06	15070352.19	0.0070	0.0019	
Mercury	36549-05-12 13:55 G	15070439.96	15070440.08	15070440.20	0.0070	0.0029	
Mercury	36549-08-08 14:24 G	15070528.00	15070528.10	15070528.21	0.0070	0.0040	
Mercury	36549-11-04 15:07 G	15070616.04	15070616.13	15070616.22	0.0070	0.0051	
Mercury	36550-01-31 15:21 G	15070704.09	15070704.14	15070704.22	0.0071	0.0062	
Venus	36624-03-11 00:57 G	15097770.40	15097770.54	15097770.73	0.0080	0.0053	
Venus	36624-10-22 11:17 G	15097995.78	15097995.97	15097996.19	0.0080	0.0032	
Moon	36626-11-05 10:19 G	15098739.81	15098739.93	15098740.10	0.0078	0.0063	
Earth	36626-11-05 11:45 G	15098739.87	15098739.99	15098740.14	0.0078	0.0066	*
Mercury	36633-04-17 11:45 G	15101094.88	15101094.99	15101095.14	0.0075	0.0056	
Mercury	36633-07-14 14:38 G	15101182.94	15101183.11	15101183.29	0.0075	0.0036	
Mercury	36633-10-10 17:17 G	15101271.03	15101271.22	15101271.42	0.0075	0.0017	
Mercury	36634-01-06 19:55 G	15101359.14	15101359.33	15101359.53	0.0075	0.0003	
Mercury	36634-04-04 22:19 G	15101447.25	15101447.43	15101447.63	0.0074	0.0022	
Mercury	36634-07-02 00:57 G	15101535.38	15101535.54	15101535.72	0.0074	0.0040	
Mercury	36634-09-28 03:21 G	15101623.54	15101623.64	15101623.78	0.0074	0.0059	
Mars	36776-04-14 12:00 G	15153321.89	15153322.00	15153322.13	0.0063	0.0057	
Venus	36781-05-17 17:31 G	15155181.15	15155181.23	15155181.35	0.0064	0.0058	
Venus	36781-12-28 21:50 G	15155406.20	15155406.41	15155406.63	0.0065	0.0014	

Venus	36782-08-11 01:41 G	15155631.39	15155631.57	15155631.78	0.0065	0.0031
Moon	36784-05-05 17:31 G	15156265.10	15156265.23	15156265.39	0.0066	0.0054
Earth	36784-05-05 17:17 G	15156265.12	15156265.22	15156265.40	0.0066	0.0056 *
Moon	36785-05-07 06:00 G	15156631.54	15156631.75	15156632.02	0.0066	0.0031
Earth	36785-05-07 07:26 G	15156631.60	15156631.81	15156632.06	0.0066	0.0032 *
Mercury	36793-02-06 23:31 G	15159464.45	15159464.48	15159464.55	0.0069	0.0064
Mercury	36793-05-06 00:14 G	15159552.44	15159552.51	15159552.60	0.0069	0.0054
Mercury	36793-08-02 00:57 G	15159640.44	15159640.54	15159640.64	0.0069	0.0044
Mercury	36793-10-29 01:26 G	15159728.45	15159728.56	15159728.68	0.0069	0.0034
Mercury	36794-01-25 01:55 G	15159816.47	15159816.58	15159816.71	0.0070	0.0024
Mercury	36794-04-23 02:38 G	15159904.48	15159904.61	15159904.74	0.0070	0.0013
Mercury	36794-07-20 03:07 G	15159992.50	15159992.63	15159992.77	0.0070	0.0004
Mercury	36794-10-16 03:50 G	15160080.53	15160080.66	15160080.79	0.0070	0.0008
Mercury	36795-01-12 04:19 G	15160168.56	15160168.68	15160168.81	0.0070	0.0018
Mercury	36795-04-10 05:02 G	15160256.59	15160256.71	15160256.83	0.0070	0.0029
Mercury	36795-07-07 05:17 G	15160344.62	15160344.72	15160344.84	0.0070	0.0039
Mercury	36795-10-03 06:00 G	15160432.66	15160432.75	15160432.85	0.0070	0.0050
Mercury	36795-12-30 06:29 G	15160520.71	15160520.77	15160520.84	0.0070	0.0061
Venus	36870-04-10 11:31 G	15187650.79	15187650.98	15187651.21	0.0080	0.0028
Venus	36870-11-21 21:21 G	15187876.26	15187876.39	15187876.57	0.0079	0.0057
Earth	36872-11-07 14:53 G	15188593.00	15188593.12	15188593.29	0.0078	0.0065
Moon	36872-11-07 18:29 G	15188593.14	15188593.27	15188593.44	0.0078	0.0063 *
Mercury	36879-03-15 00:14 G	15190911.40	15190911.51	15190911.65	0.0075	0.0057
Mercury	36879-06-11 02:53 G	15190999.47	15190999.62	15190999.81	0.0075	0.0038
Mercury	36879-09-07 05:31 G	15191087.55	15191087.73	15191087.94	0.0075	0.0019
Mercury	36879-12-04 08:24 G	15191175.65	15191175.85	15191176.05	0.0075	0.0002
Mercury	36880-03-01 11:02 G	15191263.77	15191263.96	15191264.15	0.0074	0.0020
Mercury	36880-05-28 13:12 G	15191351.90	15191352.05	15191352.24	0.0074	0.0040
Mercury	36880-08-24 16:19 G	15191440.05	15191440.18	15191440.30	0.0074	0.0058

# 38TH MILLENNIUM CE

**This is a list of transits visible from Pluto in the 38th millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	37027-06-18 01:55	G	15245061.44	15245061.58	15245061.74	0.0064	0.0047	
Venus	37028-01-29 06:00	G	15245286.53	15245286.75	15245286.97	0.0065	0.0003	
Venus	37028-09-10 10:05	G	15245511.75	15245511.92	15245512.09	0.0065	0.0041	
Earth	37030-05-09 17:17	G	15246118.18	15246118.22	15246118.29	0.0065	0.0064	
Moon	37030-05-09 20:38	G	15246118.32	15246118.36	15246118.44	0.0065	0.0064	
Moon	37031-05-11 04:19	G	15246484.45	15246484.68	15246484.93	0.0066	0.0023	
Earth	37031-05-11 06:57	G	15246484.56	15246484.79	15246485.05	0.0066	0.0023	*
Mercury	37039-01-05 14:38	G	15249281.08	15249281.11	15249281.13	0.0069	0.0068	
Mercury	37039-04-03 15:07	G	15249369.06	15249369.13	15249369.20	0.0069	0.0058	
Mercury	37039-06-30 15:36	G	15249457.06	15249457.15	15249457.25	0.0069	0.0048	
Mercury	37039-09-26 16:05	G	15249545.06	15249545.17	15249545.28	0.0069	0.0037	
Mercury	37039-12-23 16:33	G	15249633.08	15249633.19	15249633.32	0.0069	0.0027	
Mercury	37040-03-20 17:17	G	15249721.09	15249721.22	15249721.35	0.0070	0.0017	
Mercury	37040-06-16 17:45	G	15249809.11	15249809.24	15249809.37	0.0070	0.0007	
Mercury	37040-09-12 18:29	G	15249897.13	15249897.27	15249897.40	0.0070	0.0004	
Mercury	37040-12-09 18:57	G	15249985.16	15249985.29	15249985.42	0.0070	0.0014	
Mercury	37041-03-07 19:26	G	15250073.19	15250073.31	15250073.43	0.0070	0.0024	
Mercury	37041-06-03 19:55	G	15250161.22	15250161.33	15250161.45	0.0070	0.0035	
Mercury	37041-08-30 20:38	G	15250249.26	15250249.36	15250249.46	0.0070	0.0046	

Mercury	37041-11-26 20:53 G	15250337.31	15250337.37	15250337.46	0.0070	0.0057
Mercury	37042-02-22 21:21 G	15250425.37	15250425.39	15250425.44	0.0070	0.0067
Venus	37116-05-11 18:57 G	15277531.07	15277531.29	15277531.50	0.0080	0.0019
Venus	37116-12-23 04:19 G	15277756.58	15277756.68	15277756.84	0.0079	0.0065
Moon	37118-11-12 11:17 G	15278445.77	15278445.97	15278446.21	0.0078	0.0046
Earth	37118-11-12 12:29 G	15278445.83	15278446.02	15278446.25	0.0078	0.0046 *
Mercury	37125-02-10 11:02 G	15280727.90	15280727.96	15280728.05	0.0075	0.0069
Mercury	37125-05-09 13:55 G	15280815.94	15280816.08	15280816.24	0.0075	0.0049
Mercury	37125-08-05 16:33 G	15280904.02	15280904.19	15280904.38	0.0075	0.0030
Mercury	37125-11-01 19:12 G	15280992.11	15280992.30	15280992.50	0.0075	0.0011
Mercury	37126-01-28 21:50 G	15281080.22	15281080.41	15281080.61	0.0075	0.0009
Mercury	37126-04-27 00:14 G	15281168.34	15281168.51	15281168.70	0.0074	0.0028
Mercury	37126-07-24 02:53 G	15281256.47	15281256.62	15281256.78	0.0074	0.0047
Mercury	37126-10-20 05:17 G	15281344.64	15281344.72	15281344.83	0.0074	0.0066
Venus	37273-07-17 09:07 G	15334941.72	15334941.88	15334942.07	0.0064	0.0040
Venus	37274-02-27 13:26 G	15335166.85	15335167.06	15335167.29	0.0065	0.0004
Venus	37274-10-10 17:31 G	15335392.09	15335392.23	15335392.38	0.0065	0.0048
Earth	37277-05-13 05:17 G	15336337.46	15336337.72	15336337.98	0.0066	0.0010
Moon	37277-05-13 08:09 G	15336337.59	15336337.84	15336338.10	0.0066	0.0012 *
Mercury	37285-02-28 05:17 G	15339185.68	15339185.72	15339185.78	0.0069	0.0063
Mercury	37285-05-27 05:45 G	15339273.67	15339273.74	15339273.83	0.0069	0.0053
Mercury	37285-08-23 06:14 G	15339361.67	15339361.76	15339361.88	0.0069	0.0043
Mercury	37285-11-19 06:57 G	15339449.68	15339449.79	15339449.91	0.0069	0.0033
Mercury	37286-02-15 07:26 G	15339537.69	15339537.81	15339537.94	0.0070	0.0023
Mercury	37286-05-14 08:09 G	15339625.71	15339625.84	15339625.97	0.0070	0.0012
Mercury	37286-08-10 08:38 G	15339713.73	15339713.86	15339713.99	0.0070	0.0003
Mercury	37286-11-06 09:07 G	15339801.76	15339801.88	15339802.02	0.0070	0.0009
Mercury	37287-02-02 09:50 G	15339889.78	15339889.91	15339890.04	0.0070	0.0019
Mercury	37287-05-01 10:19 G	15339977.81	15339977.93	15339978.05	0.0070	0.0029
Mercury	37287-07-28 10:48 G	15340065.85	15340065.95	15340066.06	0.0070	0.0040

Mercury	37287-10-24 11:31 G	15340153.89	15340153.98	15340154.07	0.0070	0.0051
Mercury	37288-01-20 11:45 G	15340241.94	15340241.99	15340242.07	0.0070	0.0062
Venus	37362-06-11 02:24 G	15367411.38	15367411.60	15367411.82	0.0080	0.0009
Venus	37363-01-22 11:45 G	15367636.94	15367636.99	15367637.09	0.0079	0.0075
Moon	37364-11-14 08:38 G	15368298.63	15368298.86	15368299.09	0.0078	0.0030
Earth	37364-11-14 11:17 G	15368298.73	15368298.97	15368299.21	0.0078	0.0028 *
Mercury	37371-04-06 00:43 G	15370632.43	15370632.53	15370632.66	0.0075	0.0060
Mercury	37371-07-03 03:21 G	15370720.49	15370720.64	15370720.82	0.0075	0.0041
Mercury	37371-09-29 06:14 G	15370808.57	15370808.76	15370808.95	0.0075	0.0021
Mercury	37371-12-26 08:53 G	15370896.67	15370896.87	15370897.07	0.0075	0.0002
Mercury	37372-03-23 11:17 G	15370984.79	15370984.97	15370985.17	0.0074	0.0018
Mercury	37372-06-19 13:55 G	15371072.92	15371073.08	15371073.26	0.0074	0.0037
Mercury	37372-09-15 16:19 G	15371161.07	15371161.18	15371161.33	0.0074	0.0056
Mars	37513-08-04 18:14 G	15422617.10	15422617.26	15422617.47	0.0062	0.0049
Venus	37519-08-18 15:07 G	15424821.96	15424822.13	15424822.32	0.0064	0.0038
Venus	37520-03-30 19:26 G	15425047.09	15425047.31	15425047.53	0.0065	0.0006
Venus	37520-11-10 23:17 G	15425272.34	15425272.47	15425272.62	0.0065	0.0050
Earth	37523-05-18 00:57 G	15426190.29	15426190.54	15426190.80	0.0066	0.0009
Moon	37523-05-18 01:26 G	15426190.30	15426190.56	15426190.84	0.0066	0.0007 *
Mercury	37531-04-25 19:41 G	15429090.28	15429090.32	15429090.39	0.0069	0.0062
Mercury	37531-07-22 20:09 G	15429178.27	15429178.34	15429178.44	0.0069	0.0052
Mercury	37531-10-18 21:07 G	15429266.28	15429266.38	15429266.48	0.0069	0.0042
Mercury	37532-01-14 21:36 G	15429354.29	15429354.40	15429354.52	0.0069	0.0032
Mercury	37532-04-11 22:05 G	15429442.30	15429442.42	15429442.55	0.0069	0.0021
Mercury	37532-07-08 22:33 G	15429530.32	15429530.44	15429530.58	0.0070	0.0012
Mercury	37532-10-04 23:17 G	15429618.34	15429618.47	15429618.60	0.0070	0.0001
Mercury	37532-12-31 23:45 G	15429706.36	15429706.49	15429706.62	0.0070	0.0010
Mercury	37533-03-30 00:29 G	15429794.39	15429794.52	15429794.64	0.0070	0.0020
Mercury	37533-06-26 00:43 G	15429882.42	15429882.53	15429882.66	0.0070	0.0031
Mercury	37533-09-22 01:26 G	15429970.46	15429970.56	15429970.67	0.0070	0.0041

Mercury	37533-12-19 01:41 G	15430058.50	15430058.57	15430058.67	0.0070	0.0053
Mercury	37534-03-17 02:38 G	15430146.55	15430146.61	15430146.67	0.0070	0.0063
Mars	37604-10-01 20:38 G	15455913.08	15455913.36	15455913.67	0.0082	0.0041
Venus	37608-07-11 06:14 G	15457291.55	15457291.76	15457291.99	0.0080	0.0016
Venus	37609-02-21 16:19 G	15457517.08	15457517.18	15457517.31	0.0079	0.0068
Earth	37610-11-18 04:19 G	15458151.43	15458151.68	15458151.94	0.0079	0.0008
Moon	37610-11-18 07:26 G	15458151.56	15458151.81	15458152.07	0.0079	0.0004 *
Mercury	37617-05-30 12:43 G	15460536.92	15460537.03	15460537.15	0.0075	0.0061
Mercury	37617-08-26 15:07 G	15460624.98	15460625.13	15460625.31	0.0075	0.0042
Mercury	37617-11-22 17:45 G	15460713.07	15460713.24	15460713.45	0.0075	0.0023
Mercury	37618-02-18 20:38 G	15460801.17	15460801.36	15460801.56	0.0075	0.0003
Mercury	37618-05-17 23:02 G	15460889.28	15460889.46	15460889.67	0.0075	0.0017
Mercury	37618-08-14 01:41 G	15460977.41	15460977.57	15460977.75	0.0074	0.0036
Mercury	37618-11-10 04:05 G	15461065.55	15461065.67	15461065.82	0.0074	0.0055
Mercury	37619-02-06 06:43 G	15461153.77	15461153.78	15461153.82	0.0074	0.0073
Mars	37759-12-27 15:36 G	15512611.95	15512612.15	15512612.42	0.0062	0.0038
Venus	37765-09-16 18:57 G	15514702.15	15514702.29	15514702.47	0.0064	0.0044
Venus	37766-04-29 23:17 G	15514927.26	15514927.47	15514927.70	0.0065	0.0002
Venus	37766-12-11 02:53 G	15515152.48	15515152.62	15515152.80	0.0065	0.0045
Moon	37769-05-19 14:24 G	15516042.89	15516043.10	15516043.33	0.0066	0.0034
Earth	37769-05-19 17:17 G	15516043.03	15516043.22	15516043.46	0.0066	0.0038 *
Earth	37770-05-21 06:57 G	15516409.66	15516409.79	15516409.99	0.0066	0.0051
Moon	37770-05-21 10:33 G	15516409.76	15516409.94	15516410.13	0.0066	0.0047 *
Mercury	37777-06-18 09:36 G	15518994.87	15518994.90	15518994.96	0.0069	0.0065
Mercury	37777-09-14 10:33 G	15519082.86	15519082.94	15519083.02	0.0069	0.0055
Mercury	37777-12-11 11:02 G	15519170.86	15519170.96	15519171.06	0.0069	0.0044
Mercury	37778-03-09 11:31 G	15519258.87	15519258.98	15519259.10	0.0069	0.0034
Mercury	37778-06-05 12:00 G	15519346.88	15519347.00	15519347.13	0.0069	0.0024
Mercury	37778-09-01 12:43 G	15519434.90	15519435.03	15519435.16	0.0070	0.0014
Mercury	37778-11-28 13:12 G	15519522.92	15519523.05	15519523.18	0.0070	0.0003

Mercury	37779-02-24 13:41 G	15519610.94	15519611.07	15519611.20	0.0070	0.0007
Mercury	37779-05-23 14:09 G	15519698.97	15519699.09	15519699.22	0.0070	0.0018
Mercury	37779-08-19 14:38 G	15519787.00	15519787.11	15519787.24	0.0070	0.0028
Mercury	37779-11-15 15:21 G	15519875.03	15519875.14	15519875.25	0.0070	0.0039
Mercury	37780-02-11 15:50 G	15519963.08	15519963.16	15519963.26	0.0070	0.0049
Mercury	37780-05-09 16:19 G	15520051.13	15520051.18	15520051.26	0.0070	0.0060
Mars	37851-02-24 12:14 G	15545907.67	15545908.01	15545908.36	0.0082	0.0002
Venus	37854-08-11 08:38 G	15547171.67	15547171.86	15547172.08	0.0080	0.0029
Venus	37855-03-24 18:57 G	15547397.14	15547397.29	15547397.46	0.0080	0.0055
Earth	37856-11-20 18:57 G	15548004.10	15548004.29	15548004.50	0.0079	0.0050
Moon	37856-11-20 19:12 G	15548004.10	15548004.30	15548004.53	0.0079	0.0046 *
Mercury	37863-07-24 23:31 G	15550441.41	15550441.48	15550441.60	0.0075	0.0066
Mercury	37863-10-21 02:24 G	15550529.46	15550529.60	15550529.77	0.0075	0.0046
Mercury	37864-01-17 05:02 G	15550617.54	15550617.71	15550617.91	0.0075	0.0027
Mercury	37864-04-14 07:55 G	15550705.63	15550705.83	15550706.03	0.0075	0.0007
Mercury	37864-07-11 10:33 G	15550793.74	15550793.94	15550794.13	0.0075	0.0012
Mercury	37864-10-07 12:43 G	15550881.87	15550882.03	15550882.23	0.0074	0.0032
Mercury	37865-01-03 15:21 G	15550970.01	15550970.14	15550970.30	0.0074	0.0050
Mercury	37865-04-01 17:45 G	15551058.19	15551058.24	15551058.33	0.0074	0.0069

# 39TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 39th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Mars	38006-05-21 11:31 G	15602606.76	15602606.98	15602607.25	0.0062	0.0034
Venus	38011-10-17 21:36 G	15604582.31	15604582.40	15604582.54	0.0064	0.0055
Venus	38012-05-30 01:41 G	15604807.37	15604807.57	15604807.80	0.0064	0.0012
Venus	38013-01-10 05:45 G	15605032.56	15605032.74	15605032.94	0.0065	0.0033
Moon	38016-05-23 18:14 G	15606262.00	15606262.26	15606262.52	0.0066	0.0013
Earth	38016-05-23 21:21 G	15606262.14	15606262.39	15606262.65	0.0066	0.0015 *
Mercury	38023-11-08 23:45 G	15608987.44	15608987.49	15608987.56	0.0069	0.0061
Mercury	38024-02-05 00:14 G	15609075.43	15609075.51	15609075.61	0.0069	0.0051
Mercury	38024-05-03 00:43 G	15609163.44	15609163.53	15609163.65	0.0069	0.0041
Mercury	38024-07-30 01:41 G	15609251.45	15609251.57	15609251.68	0.0069	0.0031
Mercury	38024-10-26 02:09 G	15609339.46	15609339.59	15609339.72	0.0069	0.0020
Mercury	38025-01-22 02:38 G	15609427.48	15609427.61	15609427.74	0.0070	0.0010
Mercury	38025-04-20 03:07 G	15609515.50	15609515.63	15609515.77	0.0070	0.0003
Mercury	38025-07-17 03:50 G	15609603.53	15609603.66	15609603.79	0.0070	0.0011
Mercury	38025-10-13 04:19 G	15609691.56	15609691.68	15609691.81	0.0070	0.0021
Mercury	38026-01-09 04:48 G	15609779.59	15609779.70	15609779.82	0.0070	0.0032
Mercury	38026-04-07 05:17 G	15609867.62	15609867.72	15609867.83	0.0070	0.0042
Mercury	38026-07-04 05:45 G	15609955.67	15609955.74	15609955.84	0.0070	0.0053
Mercury	38026-09-30 06:29 G	15610043.72	15610043.77	15610043.83	0.0070	0.0064
Mars	38097-07-17 12:43 G	15635901.68	15635902.03	15635902.37	0.0082	0.0003
Venus	38100-09-10 07:12 G	15637051.68	15637051.80	15637051.97	0.0080	0.0061
Venus	38101-04-23 17:45 G	15637277.04	15637277.24	15637277.46	0.0080	0.0024
Earth	38103-11-26 06:14 G	15638223.54	15638223.76	15638223.99	0.0078	0.0037
Moon	38103-11-26 09:07 G	15638223.64	15638223.88	15638224.12	0.0078	0.0034 *
Mercury	38109-12-14 11:45 G	15640433.90	15640433.99	15640434.12	0.0075	0.0062
Mercury	38110-03-12 14:38 G	15640521.96	15640522.11	15640522.28	0.0075	0.0042
Mercury	38110-06-08 17:17 G	15640610.04	15640610.22	15640610.42	0.0075	0.0023
Mercury	38110-09-04 19:55 G	15640698.14	15640698.33	15640698.53	0.0075	0.0004
Mercury	38110-12-01 22:33 G	15640786.25	15640786.44	15640786.64	0.0075	0.0016



Mercury	38111-02-28 00:43 G	15640874.38	15640874.53	15640874.73	0.0074	0.0036
Mercury	38111-05-27 03:21 G	15640962.52	15640962.64	15640962.79	0.0074	0.0054
Mercury	38111-08-23 05:45 G	15641050.73	15641050.74	15641050.79	0.0074	0.0073
Mars	38252-10-12 23:45 G	15692601.30	15692601.49	15692601.70	0.0062	0.0045
Venus	38258-06-30 01:55 G	15694687.40	15694687.58	15694687.79	0.0064	0.0032
Venus	38259-02-10 06:14 G	15694912.54	15694912.76	15694912.98	0.0064	0.0012
Venus	38259-09-23 09:50 G	15695137.82	15695137.91	15695138.04	0.0065	0.0056
Earth	38262-05-27 06:29 G	15696114.56	15696114.77	15696115.01	0.0066	0.0032
Moon	38262-05-27 06:29 G	15696114.57	15696114.77	15696115.00	0.0066	0.0032 *
Moon	38263-05-28 18:43 G	15696481.16	15696481.28	15696481.44	0.0066	0.0056
Earth	38263-05-28 20:53 G	15696481.24	15696481.37	15696481.50	0.0066	0.0057 *
Mercury	38270-03-31 13:12 G	15698980.01	15698980.05	15698980.11	0.0069	0.0063
Mercury	38270-06-27 13:41 G	15699068.00	15699068.07	15699068.17	0.0069	0.0053
Mercury	38270-09-23 14:24 G	15699156.00	15699156.10	15699156.21	0.0069	0.0043
Mercury	38270-12-20 14:53 G	15699244.01	15699244.12	15699244.24	0.0069	0.0032
Mercury	38271-03-18 15:21 G	15699332.02	15699332.14	15699332.27	0.0069	0.0022
Mercury	38271-06-14 16:05 G	15699420.04	15699420.17	15699420.30	0.0070	0.0012
Mercury	38271-09-10 16:33 G	15699508.06	15699508.19	15699508.32	0.0070	0.0002
Mercury	38271-12-07 17:02 G	15699596.09	15699596.21	15699596.35	0.0070	0.0010
Mercury	38272-03-04 17:31 G	15699684.11	15699684.23	15699684.37	0.0070	0.0020
Mercury	38272-05-31 18:14 G	15699772.14	15699772.26	15699772.38	0.0070	0.0030
Mercury	38272-08-27 18:29 G	15699860.18	15699860.27	15699860.39	0.0070	0.0041
Mercury	38272-11-23 19:12 G	15699948.22	15699948.30	15699948.40	0.0070	0.0052
Mercury	38273-02-19 19:41 G	15700036.27	15700036.32	15700036.39	0.0070	0.0062
Mars	38343-12-10 03:36 G	15725895.34	15725895.65	15725895.98	0.0082	0.0028
Venus	38347-05-24 14:38 G	15727156.90	15727157.11	15727157.33	0.0080	0.0019
Venus	38348-01-05 00:43 G	15727382.41	15727382.53	15727382.66	0.0080	0.0064
Moon	38349-11-28 08:10 G	15728075.62	15728075.84	15728076.08	0.0079	0.0038
Earth	38349-11-28 11:46 G	15728075.76	15728075.99	15728076.21	0.0079	0.0038 *
Mercury	38356-05-05 23:02 G	15730426.36	15730426.46	15730426.56	0.0075	0.0065

Mercury	38356-08-02 01:26 G	15730514.41	15730514.56	15730514.73	0.0075	0.0045
Mercury	38356-10-29 04:05 G	15730602.49	15730602.67	15730602.87	0.0075	0.0026
Mercury	38357-01-25 06:58 G	15730690.59	15730690.79	15730690.99	0.0075	0.0006
Mercury	38357-04-23 09:22 G	15730778.70	15730778.89	15730779.09	0.0075	0.0014
Mercury	38357-07-20 12:00 G	15730866.82	15730867.00	15730867.18	0.0074	0.0033
Mercury	38357-10-16 14:38 G	15730954.97	15730955.11	15730955.25	0.0074	0.0052
Mercury	38358-01-12 16:34 G	15731043.16	15731043.19	15731043.27	0.0074	0.0071
Venus	38504-07-30 00:58 G	15784567.46	15784567.54	15784567.66	0.0064	0.0056
Venus	38505-03-12 05:17 G	15784792.51	15784792.72	15784792.94	0.0064	0.0014
Venus	38505-10-23 09:22 G	15785017.70	15785017.89	15785018.09	0.0064	0.0030
Moon	38509-05-31 02:10 G	15786333.34	15786333.59	15786333.85	0.0066	0.0002
Earth	38509-05-31 04:34 G	15786333.43	15786333.69	15786333.95	0.0066	0.0003 *
Mercury	38516-08-21 01:55 G	15788972.58	15788972.58	15788972.62	0.0069	0.0068
Mercury	38516-11-17 02:38 G	15789060.55	15789060.61	15789060.69	0.0069	0.0058
Mercury	38517-02-13 03:22 G	15789148.55	15789148.64	15789148.74	0.0069	0.0047
Mercury	38517-05-12 03:50 G	15789236.56	15789236.66	15789236.78	0.0069	0.0037
Mercury	38517-08-08 04:19 G	15789324.57	15789324.68	15789324.81	0.0069	0.0027
Mercury	38517-11-04 05:02 G	15789412.58	15789412.71	15789412.84	0.0069	0.0017
Mercury	38518-01-31 05:31 G	15789500.60	15789500.73	15789500.87	0.0070	0.0007
Mercury	38518-04-29 06:14 G	15789588.63	15789588.76	15789588.89	0.0070	0.0004
Mercury	38518-07-26 06:43 G	15789676.65	15789676.78	15789676.91	0.0070	0.0014
Mercury	38518-10-22 07:12 G	15789764.68	15789764.80	15789764.93	0.0070	0.0025
Mercury	38519-01-18 07:41 G	15789852.71	15789852.82	15789852.94	0.0070	0.0036
Mercury	38519-04-16 08:10 G	15789940.75	15789940.84	15789940.95	0.0070	0.0046
Mercury	38519-07-13 08:38 G	15790028.80	15790028.86	15790028.95	0.0070	0.0057
Mercury	38519-10-09 09:36 G	15790116.87	15790116.90	15790116.93	0.0070	0.0068
Venus	38593-06-22 07:26 G	15817036.81	15817036.81	15817036.81	0.0080	0.0080
Venus	38594-02-02 17:46 G	15817262.02	15817262.24	15817262.46	0.0080	0.0004
Moon	38596-12-01 12:00 G	15818294.74	15818295.00	15818295.27	0.0078	0.0015
Earth	38596-12-01 13:41 G	15818294.83	15818295.07	15818295.33	0.0078	0.0018 *

Mercury	38602-12-23 10:34 G	15820506.82	15820506.94	15820507.07	0.0075	0.0059
Mercury	38603-03-21 12:58 G	15820594.88	15820595.04	15820595.22	0.0075	0.0039
Mercury	38603-06-17 15:36 G	15820682.97	15820683.15	15820683.35	0.0075	0.0020
Mercury	38603-09-13 18:29 G	15820771.07	15820771.27	15820771.47	0.0075	0.0000
Mercury	38603-12-10 20:53 G	15820859.19	15820859.37	15820859.57	0.0075	0.0020
Mercury	38604-03-07 23:31 G	15820947.32	15820947.48	15820947.65	0.0074	0.0039
Mercury	38604-06-04 02:10 G	15821035.47	15821035.59	15821035.72	0.0074	0.0058
Venus	38751-04-12 01:26 G	15874672.43	15874672.56	15874672.72	0.0064	0.0048
Venus	38751-11-23 05:46 G	15874897.52	15874897.74	15874897.96	0.0064	0.0005
Venus	38752-07-05 09:36 G	15875122.73	15875122.90	15875123.08	0.0064	0.0038
Earth	38755-06-03 07:12 G	15876185.74	15876185.80	15876185.91	0.0066	0.0062
Moon	38755-06-03 10:48 G	15876185.94	15876185.95	15876186.00	0.0066	0.0065
Moon	38756-06-03 17:31 G	15876552.02	15876552.23	15876552.48	0.0066	0.0030
Earth	38756-06-03 21:07 G	15876552.16	15876552.38	15876552.64	0.0066	0.0026 *
Mercury	38763-04-09 14:53 G	15879053.12	15879053.12	15879053.15	0.0069	0.0068
Mercury	38763-07-06 15:22 G	15879141.08	15879141.14	15879141.22	0.0069	0.0058
Mercury	38763-10-02 15:50 G	15879229.08	15879229.16	15879229.27	0.0069	0.0049
Mercury	38763-12-29 16:34 G	15879317.09	15879317.19	15879317.31	0.0069	0.0038
Mercury	38764-03-26 17:17 G	15879405.10	15879405.22	15879405.34	0.0069	0.0027
Mercury	38764-06-22 17:46 G	15879493.12	15879493.24	15879493.37	0.0069	0.0017
Mercury	38764-09-18 18:14 G	15879581.14	15879581.26	15879581.40	0.0069	0.0008
Mercury	38764-12-15 18:58 G	15879669.16	15879669.29	15879669.42	0.0070	0.0004
Mercury	38765-03-13 19:26 G	15879757.18	15879757.31	15879757.44	0.0070	0.0014
Mercury	38765-06-09 19:55 G	15879845.21	15879845.33	15879845.46	0.0070	0.0025
Mercury	38765-09-05 20:38 G	15879933.25	15879933.36	15879933.47	0.0070	0.0035
Mercury	38765-12-02 20:53 G	15880021.29	15880021.37	15880021.48	0.0070	0.0046
Mercury	38766-02-28 21:50 G	15880109.33	15880109.41	15880109.48	0.0070	0.0057
Mercury	38766-05-27 22:05 G	15880197.40	15880197.42	15880197.46	0.0070	0.0068
Venus	38840-03-04 07:41 G	15907141.72	15907141.82	15907141.95	0.0080	0.0068
Venus	38840-10-15 18:29 G	15907367.06	15907367.27	15907367.49	0.0080	0.0016

Earth	38843-12-06 12:00 G	15908513.86	15908514.00	15908514.18	0.0078	0.0060
Moon	38843-12-06 12:14 G	15908513.88	15908514.01	15908514.19	0.0078	0.0064 *
Mercury	38849-08-09 20:38 G	15910587.26	15910587.36	15910587.51	0.0075	0.0059
Mercury	38849-11-05 23:31 G	15910675.32	15910675.48	15910675.66	0.0075	0.0039
Mercury	38850-02-02 02:10 G	15910763.41	15910763.59	15910763.79	0.0075	0.0020
Mercury	38850-05-01 05:02 G	15910851.51	15910851.71	15910851.91	0.0075	0.0000
Mercury	38850-07-28 07:26 G	15910939.63	15910939.81	15910940.01	0.0075	0.0020
Mercury	38850-10-24 10:05 G	15911027.75	15911027.92	15911028.09	0.0074	0.0039
Mercury	38851-01-20 12:14 G	15911115.91	15911116.01	15911116.15	0.0074	0.0058
Mars	38993-11-09 22:34 G	15963274.36	15963274.44	15963274.61	0.0063	0.0057
Venus	38997-12-22 00:43 G	15964777.38	15964777.53	15964777.70	0.0064	0.0044
Venus	38998-08-04 04:48 G	15965002.48	15965002.70	15965002.92	0.0064	0.0002
Venus	38999-03-17 08:53 G	15965227.71	15965227.87	15965228.04	0.0064	0.0042

# 40TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 40th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Earth	39002-06-06 22:48 G	15966404.26	15966404.45	15966404.65	0.0066	0.0044		
Moon	39002-06-07 00:58 G	15966404.37	15966404.54	15966404.76	0.0066	0.0042 *		
Moon	39003-06-08 08:53 G	15966770.68	15966770.87	15966771.08	0.0066	0.0042		
Earth	39003-06-08 12:29 G	15966770.84	15966771.02	15966771.23	0.0066	0.0044 *		
Mercury	39010-02-22 03:50 G	15969221.62	15969221.66	15969221.73	0.0069	0.0061		

Mercury	39010-05-21 04:19 G	15969309.61	15969309.68	15969309.78	0.0069	0.0051
Mercury	39010-08-17 05:17 G	15969397.61	15969397.72	15969397.82	0.0069	0.0041
Mercury	39010-11-13 05:46 G	15969485.62	15969485.74	15969485.86	0.0069	0.0030
Mercury	39011-02-09 06:14 G	15969573.64	15969573.76	15969573.89	0.0069	0.0020
Mercury	39011-05-08 06:58 G	15969661.66	15969661.79	15969661.92	0.0069	0.0010
Mercury	39011-08-04 07:26 G	15969749.68	15969749.81	15969749.94	0.0069	0.0001
Mercury	39011-10-31 07:55 G	15969837.70	15969837.83	15969837.96	0.0070	0.0011
Mercury	39012-01-27 08:24 G	15969925.73	15969925.85	15969925.98	0.0070	0.0022
Mercury	39012-04-24 09:07 G	15970013.76	15970013.88	15970014.00	0.0070	0.0032
Mercury	39012-07-21 09:22 G	15970101.80	15970101.89	15970102.01	0.0070	0.0043
Mercury	39012-10-17 09:50 G	15970189.84	15970189.91	15970190.01	0.0070	0.0054
Mercury	39013-01-13 10:34 G	15970277.90	15970277.94	15970278.00	0.0070	0.0064
Venus	39086-11-15 05:17 G	15997246.64	15997246.72	15997246.84	0.0080	0.0072
Venus	39087-06-28 16:05 G	15997471.95	15997472.17	15997472.39	0.0080	0.0013
Moon	39089-12-07 23:46 G	15998365.33	15998365.49	15998365.67	0.0079	0.0059
Earth	39089-12-08 03:07 G	15998365.47	15998365.63	15998365.79	0.0079	0.0062 *
Mercury	39096-03-28 05:46 G	16000667.68	16000667.74	16000667.84	0.0075	0.0069
Mercury	39096-06-24 08:38 G	16000755.72	16000755.86	16000756.02	0.0075	0.0048
Mercury	39096-09-20 11:02 G	16000843.79	16000843.96	16000844.16	0.0075	0.0029
Mercury	39096-12-17 13:41 G	16000931.89	16000932.07	16000932.28	0.0075	0.0010
Mercury	39097-03-15 16:19 G	16001019.99	16001020.18	16001020.38	0.0075	0.0011
Mercury	39097-06-11 18:43 G	16001108.11	16001108.28	16001108.48	0.0074	0.0030
Mercury	39097-09-07 21:22 G	16001196.25	16001196.39	16001196.55	0.0074	0.0049
Mercury	39097-12-05 00:00 G	16001284.43	16001284.50	16001284.59	0.0074	0.0068
Mars	39240-04-02 18:29 G	16053267.98	16053268.27	16053268.57	0.0062	0.0001
Venus	39244-09-02 21:36 G	16054882.28	16054882.40	16054882.56	0.0064	0.0050
Venus	39245-04-16 01:55 G	16055107.36	16055107.58	16055107.80	0.0064	0.0007
Venus	39245-11-27 05:31 G	16055332.56	16055332.73	16055332.93	0.0064	0.0036
Earth	39249-06-09 09:07 G	16056622.69	16056622.88	16056623.11	0.0066	0.0039
Moon	39249-06-09 11:17 G	16056622.77	16056622.97	16056623.18	0.0066	0.0038 *

Moon	39250-06-10 19:55 G	16056989.17	16056989.33	16056989.52	0.0066	0.0048
Earth	39250-06-10 23:02 G	16056989.32	16056989.46	16056989.65	0.0066	0.0050 *
Mercury	39257-01-05 16:19 G	16059390.12	16059390.18	16059390.25	0.0069	0.0059
Mercury	39257-04-03 16:48 G	16059478.12	16059478.20	16059478.30	0.0069	0.0049
Mercury	39257-06-30 17:17 G	16059566.12	16059566.22	16059566.34	0.0069	0.0039
Mercury	39257-09-26 17:46 G	16059654.13	16059654.24	16059654.37	0.0069	0.0029
Mercury	39257-12-23 18:29 G	16059742.15	16059742.27	16059742.40	0.0069	0.0019
Mercury	39258-03-21 18:58 G	16059830.17	16059830.29	16059830.43	0.0069	0.0009
Mercury	39258-06-17 19:41 G	16059918.19	16059918.32	16059918.45	0.0069	0.0002
Mercury	39258-09-13 20:10 G	16060006.21	16060006.34	16060006.47	0.0070	0.0013
Mercury	39258-12-10 20:38 G	16060094.24	16060094.36	16060094.49	0.0070	0.0023
Mercury	39259-03-08 21:07 G	16060182.28	16060182.38	16060182.50	0.0070	0.0034
Mercury	39259-06-04 21:36 G	16060270.31	16060270.40	16060270.51	0.0070	0.0045
Mercury	39259-08-31 22:19 G	16060358.36	16060358.43	16060358.52	0.0070	0.0055
Mercury	39259-11-27 22:48 G	16060446.42	16060446.45	16060446.50	0.0070	0.0066
Venus	39334-03-10 11:02 G	16087576.74	16087576.96	16087577.19	0.0080	0.0002
Moon	39336-12-11 12:29 G	16088583.83	16088584.02	16088584.23	0.0078	0.0048
Earth	39336-12-11 16:19 G	16088583.98	16088584.18	16088584.39	0.0078	0.0048 *
Mercury	39343-02-10 16:05 G	16090836.10	16090836.17	16090836.29	0.0075	0.0065
Mercury	39343-05-09 18:58 G	16090924.15	16090924.29	16090924.46	0.0075	0.0045
Mercury	39343-08-05 21:50 G	16091012.23	16091012.41	16091012.60	0.0075	0.0025
Mercury	39343-11-02 00:29 G	16091100.32	16091100.52	16091100.72	0.0075	0.0006
Mercury	39344-01-29 02:53 G	16091188.43	16091188.62	16091188.82	0.0075	0.0014
Mercury	39344-04-26 05:17 G	16091276.56	16091276.72	16091276.91	0.0074	0.0033
Mercury	39344-07-23 07:41 G	16091364.70	16091364.82	16091364.98	0.0074	0.0053
Mercury	39344-10-19 10:19 G	16091452.89	16091452.93	16091453.00	0.0074	0.0072
Mars	39486-08-25 08:10 G	16143261.78	16143261.84	16143261.94	0.0062	0.0060
Venus	39491-05-16 17:17 G	16144987.17	16144987.22	16144987.32	0.0064	0.0060
Venus	39491-12-27 21:36 G	16145212.19	16145212.40	16145212.61	0.0064	0.0017
Venus	39492-08-09 01:12 G	16145437.36	16145437.55	16145437.76	0.0064	0.0025

Earth	39496-06-12 17:17 G	16146841.04	16146841.22	16146841.46	0.0066	0.0039
Moon	39496-06-12 17:46 G	16146841.07	16146841.24	16146841.46	0.0066	0.0042 *
Moon	39497-06-14 05:31 G	16147207.59	16147207.73	16147207.90	0.0066	0.0053
Earth	39497-06-14 07:26 G	16147207.66	16147207.81	16147208.00	0.0066	0.0051 *
Mercury	39503-11-22 04:05 G	16149558.62	16149558.67	16149558.75	0.0069	0.0061
Mercury	39504-02-18 05:02 G	16149646.62	16149646.71	16149646.80	0.0069	0.0050
Mercury	39504-05-16 05:17 G	16149734.62	16149734.72	16149734.84	0.0069	0.0040
Mercury	39504-08-12 05:46 G	16149822.63	16149822.74	16149822.87	0.0069	0.0031
Mercury	39504-11-08 06:29 G	16149910.65	16149910.77	16149910.90	0.0069	0.0020
Mercury	39505-02-04 07:12 G	16149998.67	16149998.80	16149998.93	0.0069	0.0009
Mercury	39505-05-03 07:41 G	16150086.69	16150086.82	16150086.95	0.0069	0.0001
Mercury	39505-07-30 08:10 G	16150174.71	16150174.84	16150174.97	0.0070	0.0012
Mercury	39505-10-26 08:38 G	16150262.74	16150262.86	16150262.99	0.0070	0.0022
Mercury	39506-01-22 09:07 G	16150350.77	16150350.88	16150351.00	0.0070	0.0033
Mercury	39506-04-20 09:50 G	16150438.81	16150438.91	16150439.01	0.0070	0.0043
Mercury	39506-07-17 10:05 G	16150526.85	16150526.92	16150527.02	0.0070	0.0054
Mercury	39506-10-13 10:34 G	16150614.91	16150614.94	16150615.01	0.0070	0.0065
Mars	39577-10-17 18:00 G	16176552.17	16176552.25	16176552.36	0.0082	0.0078
Venus	39580-11-20 03:07 G	16177681.44	16177681.63	16177681.85	0.0080	0.0032
Venus	39581-07-03 13:12 G	16177906.90	16177907.05	16177907.24	0.0080	0.0052
Moon	39583-12-15 21:07 G	16178802.22	16178802.38	16178802.59	0.0078	0.0055
Earth	39583-12-16 00:43 G	16178802.36	16178802.53	16178802.75	0.0078	0.0051 *
Mercury	39589-12-26 00:58 G	16181004.50	16181004.54	16181004.63	0.0075	0.0071
Mercury	39590-03-24 03:50 G	16181092.53	16181092.66	16181092.82	0.0075	0.0051
Mercury	39590-06-20 06:43 G	16181180.60	16181180.78	16181180.96	0.0075	0.0031
Mercury	39590-09-16 09:07 G	16181268.69	16181268.88	16181269.08	0.0075	0.0012
Mercury	39590-12-13 11:46 G	16181356.80	16181356.99	16181357.19	0.0075	0.0008
Mercury	39591-03-11 14:10 G	16181444.92	16181445.09	16181445.29	0.0075	0.0028
Mercury	39591-06-07 16:48 G	16181533.05	16181533.20	16181533.36	0.0074	0.0047
Mercury	39591-09-03 18:58 G	16181621.22	16181621.29	16181621.40	0.0074	0.0066

Mars	39734-12-07 04:19 G	16233945.54	16233945.68	16233945.86	0.0063	0.0053
Venus	39738-09-08 14:10 G	16235316.93	16235317.09	16235317.28	0.0064	0.0039
Saturn	39739-02-09 22:48 G	16235470.95	16235471.45	16235472.09	0.0064	0.0033
Venus	39739-04-21 18:29 G	16235542.05	16235542.27	16235542.49	0.0064	0.0004
Venus	39739-12-02 21:50 G	16235767.28	16235767.41	16235767.58	0.0064	0.0047
Moon	39743-06-16 20:38 G	16237059.20	16237059.36	16237059.53	0.0066	0.0050
Earth	39743-06-16 21:22 G	16237059.26	16237059.39	16237059.56	0.0066	0.0053 *
Moon	39744-06-17 11:02 G	16237425.74	16237425.96	16237426.20	0.0066	0.0033
Earth	39744-06-17 11:02 G	16237425.76	16237425.96	16237426.20	0.0066	0.0036 *
Mercury	39750-10-05 15:22 G	16239727.14	16239727.14	16239727.16	0.0069	0.0068
Mercury	39751-01-01 16:05 G	16239815.10	16239815.17	16239815.24	0.0069	0.0058
Mercury	39751-03-30 16:34 G	16239903.10	16239903.19	16239903.28	0.0069	0.0048
Mercury	39751-06-26 17:02 G	16239991.11	16239991.21	16239991.32	0.0069	0.0038
Mercury	39751-09-22 17:31 G	16240079.12	16240079.23	16240079.36	0.0069	0.0028
Mercury	39751-12-19 18:14 G	16240167.13	16240167.26	16240167.39	0.0069	0.0017
Mercury	39752-03-16 18:43 G	16240255.15	16240255.28	16240255.41	0.0069	0.0007
Mercury	39752-06-12 19:12 G	16240343.17	16240343.30	16240343.44	0.0069	0.0004
Mercury	39752-09-08 19:55 G	16240431.20	16240431.33	16240431.46	0.0070	0.0014
Mercury	39752-12-05 20:10 G	16240519.23	16240519.34	16240519.47	0.0070	0.0025
Mercury	39753-03-03 20:53 G	16240607.26	16240607.37	16240607.49	0.0070	0.0035
Mercury	39753-05-30 21:22 G	16240695.30	16240695.39	16240695.49	0.0070	0.0046
Mercury	39753-08-26 22:05 G	16240783.34	16240783.42	16240783.50	0.0070	0.0056
Mercury	39753-11-22 22:34 G	16240871.41	16240871.44	16240871.48	0.0070	0.0067
Venus	39827-08-02 15:50 G	16267786.12	16267786.16	16267786.23	0.0080	0.0078
Venus	39828-03-15 02:24 G	16268011.38	16268011.60	16268011.83	0.0080	0.0007
Moon	39830-12-19 01:55 G	16269020.44	16269020.58	16269020.73	0.0078	0.0066
Earth	39830-12-19 04:05 G	16269020.58	16269020.67	16269020.82	0.0078	0.0070 *
Moon	39831-12-21 10:05 G	16269387.88	16269387.92	16269387.98	0.0078	0.0076
Mercury	39837-02-05 10:48 G	16271260.88	16271260.95	16271261.07	0.0075	0.0066
Mercury	39837-05-04 13:41 G	16271348.93	16271349.07	16271349.24	0.0075	0.0046



Mercury	39837-07-31 16:34 G	16271437.01	16271437.19	16271437.38	0.0075	0.0026
Mercury	39837-10-27 19:12 G	16271525.10	16271525.30	16271525.50	0.0075	0.0007
Mercury	39838-01-23 21:36 G	16271613.21	16271613.40	16271613.60	0.0075	0.0013
Mercury	39838-04-22 00:00 G	16271701.33	16271701.50	16271701.69	0.0074	0.0033
Mercury	39838-07-19 02:38 G	16271789.48	16271789.61	16271789.76	0.0074	0.0052
Mercury	39838-10-15 05:17 G	16271877.67	16271877.72	16271877.78	0.0074	0.0071
Mars	39981-04-29 08:53 G	16323938.66	16323938.87	16323939.15	0.0062	0.0035
Venus	39986-01-01 09:07 G	16325646.70	16325646.88	16325647.11	0.0064	0.0024
Venus	39986-08-14 13:12 G	16325871.85	16325872.05	16325872.27	0.0064	0.0019
Venus	39987-03-27 17:17 G	16326097.17	16326097.22	16326097.29	0.0064	0.0062
Earth	39991-06-21 12:00 G	16327643.76	16327644.00	16327644.27	0.0066	0.0015
Moon	39991-06-21 13:26 G	16327643.80	16327644.06	16327644.33	0.0066	0.0014 *
Mercury	39998-02-12 03:07 G	16330071.57	16330071.63	16330071.70	0.0069	0.0060
Mercury	39998-05-11 03:36 G	16330159.57	16330159.65	16330159.75	0.0069	0.0050
Mercury	39998-08-07 04:05 G	16330247.57	16330247.67	16330247.78	0.0069	0.0040
Mercury	39998-11-03 04:48 G	16330335.58	16330335.70	16330335.82	0.0069	0.0029
Mercury	39999-01-30 05:17 G	16330423.60	16330423.72	16330423.85	0.0069	0.0019
Mercury	39999-04-28 05:46 G	16330511.61	16330511.74	16330511.88	0.0069	0.0009
Mercury	39999-07-25 06:29 G	16330599.64	16330599.77	16330599.90	0.0069	0.0002
Mercury	39999-10-21 06:58 G	16330687.66	16330687.79	16330687.92	0.0069	0.0012
Mercury	40000-01-17 07:26 G	16330775.69	16330775.81	16330775.94	0.0070	0.0023
Mercury	40000-04-14 07:55 G	16330863.72	16330863.83	16330863.95	0.0070	0.0034
Mercury	40000-07-11 08:38 G	16330951.76	16330951.86	16330951.96	0.0070	0.0044
Mercury	40000-10-07 08:53 G	16331039.80	16331039.87	16331039.96	0.0070	0.0055

# 41ST MILLENNIUM CE

## This is a list of transits visible from Pluto in the 41st millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	40001-01-03 09:22	G	16331127.86	16331127.89	16331127.95	0.0070	0.0066	
Mars	40072-06-20 06:43	G	16357228.44	16357228.78	16357229.12	0.0082	0.0003	
Venus	40074-11-24 10:48	G	16358115.82	16358115.95	16358116.13	0.0080	0.0058	
Venus	40075-07-07 21:36	G	16358341.20	16358341.40	16358341.62	0.0080	0.0027	
Earth	40078-12-23 05:17	G	16359605.50	16359605.72	16359605.94	0.0078	0.0041	
Moon	40078-12-23 07:12	G	16359605.61	16359605.80	16359606.03	0.0078	0.0042	*
Mercury	40084-03-17 18:58	G	16361517.26	16361517.29	16361517.36	0.0075	0.0072	
Mercury	40084-06-13 21:36	G	16361605.28	16361605.40	16361605.56	0.0075	0.0052	
Mercury	40084-09-10 00:29	G	16361693.35	16361693.52	16361693.70	0.0075	0.0032	
Mercury	40084-12-07 03:07	G	16361781.44	16361781.63	16361781.83	0.0075	0.0013	
Mercury	40085-03-05 05:46	G	16361869.54	16361869.74	16361869.94	0.0075	0.0007	
Mercury	40085-06-01 08:10	G	16361957.66	16361957.84	16361958.03	0.0075	0.0027	
Mercury	40085-08-28 10:48	G	16362045.80	16362045.95	16362046.11	0.0074	0.0046	
Mercury	40085-11-24 12:58	G	16362133.97	16362134.04	16362134.15	0.0074	0.0065	
Mars	40229-08-10 16:05	G	16414622.03	16414622.17	16414622.37	0.0063	0.0051	
Venus	40232-09-12 20:53	G	16415751.36	16415751.37	16415751.44	0.0064	0.0063	
Venus	40233-04-26 01:12	G	16415976.35	16415976.55	16415976.77	0.0064	0.0021	
Venus	40233-12-07 05:17	G	16416201.51	16416201.72	16416201.93	0.0064	0.0021	
Venus	40234-07-20 08:53	G	16416426.87	16416426.87	16416426.89	0.0064	0.0064	
Earth	40238-06-24 07:12	G	16417861.57	16417861.80	16417862.06	0.0066	0.0023	
Moon	40238-06-24 09:22	G	16417861.65	16417861.89	16417862.16	0.0066	0.0020	*
Moon	40239-06-25 21:36	G	16418228.34	16418228.40	16418228.47	0.0066	0.0064	
Mercury	40245-06-21 13:41	G	16420416.02	16420416.07	16420416.15	0.0069	0.0059	
Mercury	40245-09-17 14:10	G	16420504.01	16420504.09	16420504.20	0.0069	0.0049	
Mercury	40245-12-14 14:38	G	16420592.02	16420592.11	16420592.23	0.0069	0.0039	
Mercury	40246-03-12 15:22	G	16420680.03	16420680.14	16420680.27	0.0069	0.0028	

Mercury	40246-06-08 16:05 G	16420768.04	16420768.17	16420768.30	0.0069	0.0018
Mercury	40246-09-04 16:34 G	16420856.06	16420856.19	16420856.33	0.0069	0.0008
Mercury	40246-12-01 17:17 G	16420944.09	16420944.22	16420944.35	0.0069	0.0003
Mercury	40247-02-27 17:46 G	16421032.11	16421032.24	16421032.37	0.0069	0.0014
Mercury	40247-05-26 18:00 G	16421120.14	16421120.25	16421120.39	0.0070	0.0025
Mercury	40247-08-22 18:43 G	16421208.17	16421208.28	16421208.40	0.0070	0.0035
Mercury	40247-11-18 19:12 G	16421296.21	16421296.30	16421296.41	0.0070	0.0046
Mercury	40248-02-14 19:55 G	16421384.26	16421384.33	16421384.41	0.0070	0.0056
Mercury	40248-05-12 20:10 G	16421472.32	16421472.34	16421472.39	0.0070	0.0067
Venus	40322-03-20 02:24 G	16448445.46	16448445.60	16448445.78	0.0080	0.0056
Venus	40322-10-31 12:58 G	16448670.85	16448671.04	16448671.26	0.0080	0.0029
Earth	40325-12-26 20:53 G	16449823.13	16449823.37	16449823.63	0.0078	0.0017
Moon	40325-12-26 22:48 G	16449823.20	16449823.45	16449823.70	0.0078	0.0013 *
Mercury	40331-07-27 03:36 G	16451861.60	16451861.65	16451861.75	0.0075	0.0070
Mercury	40331-10-23 06:29 G	16451949.64	16451949.77	16451949.93	0.0075	0.0049
Mercury	40332-01-19 09:22 G	16452037.71	16452037.89	16452038.07	0.0075	0.0029
Mercury	40332-04-16 11:46 G	16452125.80	16452125.99	16452126.19	0.0075	0.0010
Mercury	40332-07-13 14:24 G	16452213.91	16452214.10	16452214.30	0.0075	0.0010
Mercury	40332-10-09 16:48 G	16452302.03	16452302.20	16452302.39	0.0075	0.0030
Mercury	40333-01-05 19:26 G	16452390.17	16452390.31	16452390.46	0.0074	0.0049
Mercury	40333-04-03 21:36 G	16452478.34	16452478.40	16452478.50	0.0074	0.0068
Venus	40480-08-17 15:22 G	16506305.95	16506306.14	16506306.36	0.0064	0.0024
Venus	40481-03-30 19:41 G	16506531.11	16506531.32	16506531.53	0.0064	0.0018
Venus	40481-11-10 23:02 G	16506756.42	16506756.46	16506756.55	0.0064	0.0061
Moon	40486-06-27 12:43 G	16508445.81	16508446.03	16508446.28	0.0066	0.0023
Earth	40486-06-27 13:55 G	16508445.84	16508446.08	16508446.33	0.0066	0.0021 *
Mercury	40492-10-27 23:46 G	16510760.45	16510760.49	16510760.56	0.0069	0.0062
Mercury	40493-01-24 00:43 G	16510848.44	16510848.53	16510848.62	0.0069	0.0051
Mercury	40493-04-22 00:58 G	16510936.45	16510936.54	16510936.66	0.0069	0.0041
Mercury	40493-07-19 01:41 G	16511024.46	16511024.57	16511024.69	0.0069	0.0031

Mercury	40493-10-15 02:24 G	16511112.47	16511112.60	16511112.72	0.0069	0.0020
Mercury	40494-01-11 02:53 G	16511200.49	16511200.62	16511200.75	0.0069	0.0010
Mercury	40494-04-09 03:22 G	16511288.51	16511288.64	16511288.77	0.0069	0.0001
Mercury	40494-07-06 03:50 G	16511376.53	16511376.66	16511376.80	0.0069	0.0011
Mercury	40494-10-02 04:19 G	16511464.56	16511464.68	16511464.81	0.0069	0.0022
Mercury	40494-12-29 05:02 G	16511552.59	16511552.71	16511552.83	0.0070	0.0032
Mercury	40495-03-27 05:31 G	16511640.63	16511640.73	16511640.84	0.0070	0.0043
Mercury	40495-06-23 05:46 G	16511728.68	16511728.74	16511728.84	0.0070	0.0054
Mercury	40495-09-19 06:29 G	16511816.73	16511816.77	16511816.83	0.0070	0.0064
Mars	40567-02-20 07:55 G	16537902.82	16537902.83	16537902.93	0.0082	0.0081
Venus	40569-07-11 13:41 G	16538775.00	16538775.07	16538775.17	0.0080	0.0074
Venus	40570-02-22 00:14 G	16539000.30	16539000.51	16539000.73	0.0080	0.0011
Jupiter	40572-07-21 17:02 G	16539880.79	16539881.21	16539881.74	0.0079	0.0043
Moon	40573-12-30 05:31 G	16540407.56	16540407.73	16540407.94	0.0078	0.0054
Earth	40573-12-30 08:10 G	16540407.67	16540407.84	16540408.05	0.0078	0.0052 *
Mercury	40579-02-28 13:26 G	16542293.95	16542294.06	16542294.19	0.0075	0.0058
Mercury	40579-05-27 16:05 G	16542382.01	16542382.17	16542382.35	0.0075	0.0038
Mercury	40579-08-23 18:29 G	16542470.09	16542470.27	16542470.47	0.0075	0.0019
Mercury	40579-11-19 21:22 G	16542558.19	16542558.39	16542558.59	0.0075	0.0001
Mercury	40580-02-15 23:46 G	16542646.31	16542646.49	16542646.68	0.0075	0.0021
Mercury	40580-05-14 02:24 G	16542734.43	16542734.60	16542734.77	0.0074	0.0040
Mercury	40580-08-10 04:34 G	16542822.59	16542822.69	16542822.82	0.0074	0.0059
Mars	40724-04-13 03:50 G	16595297.37	16595297.66	16595297.96	0.0062	0.0004
Venus	40727-12-12 03:22 G	16596635.47	16596635.64	16596635.83	0.0064	0.0037
Venus	40728-07-24 07:12 G	16596860.58	16596860.80	16596861.02	0.0064	0.0005
Venus	40729-03-06 10:34 G	16597085.81	16597085.94	16597086.11	0.0064	0.0047
Moon	40733-06-30 22:48 G	16598663.27	16598663.45	16598663.69	0.0066	0.0036
Earth	40733-07-01 01:12 G	16598663.35	16598663.55	16598663.78	0.0066	0.0037 *
Earth	40734-07-02 15:07 G	16599029.99	16599030.13	16599030.30	0.0066	0.0053
Moon	40734-07-02 15:22 G	16599029.99	16599030.14	16599030.34	0.0066	0.0050 *

Mercury	40740-06-03 10:05 G	16601192.86	16601192.92	16601192.99	0.0069	0.0060
Mercury	40740-08-30 10:34 G	16601280.86	16601280.94	16601281.04	0.0069	0.0050
Mercury	40740-11-26 11:02 G	16601368.86	16601368.96	16601369.08	0.0069	0.0040
Mercury	40741-02-22 11:46 G	16601456.87	16601456.99	16601457.11	0.0069	0.0029
Mercury	40741-05-21 12:14 G	16601544.89	16601545.01	16601545.14	0.0069	0.0019
Mercury	40741-08-17 12:43 G	16601632.91	16601633.03	16601633.17	0.0069	0.0009
Mercury	40741-11-13 13:26 G	16601720.93	16601721.06	16601721.19	0.0069	0.0002
Mercury	40742-02-09 13:55 G	16601808.95	16601809.08	16601809.21	0.0069	0.0012
Mercury	40742-05-08 14:24 G	16601896.98	16601897.10	16601897.23	0.0069	0.0023
Mercury	40742-08-04 14:53 G	16601985.01	16601985.12	16601985.24	0.0070	0.0034
Mercury	40742-10-31 15:36 G	16602073.05	16602073.15	16602073.25	0.0070	0.0044
Mercury	40743-01-27 16:05 G	16602161.10	16602161.17	16602161.25	0.0070	0.0055
Mercury	40743-04-25 16:19 G	16602249.16	16602249.18	16602249.24	0.0070	0.0066
Mars	40815-06-04 05:17 G	16628586.70	16628586.72	16628586.81	0.0081	0.0081
Venus	40817-06-16 08:38 G	16629329.65	16629329.86	16629330.08	0.0080	0.0022
Venus	40818-01-27 18:58 G	16629555.15	16629555.29	16629555.44	0.0080	0.0061
Moon	40821-01-01 11:02 G	16630624.76	16630624.96	16630625.21	0.0078	0.0043
Earth	40821-01-01 12:43 G	16630624.84	16630625.03	16630625.27	0.0078	0.0045 *
Mercury	40826-10-03 21:22 G	16632726.27	16632726.39	16632726.53	0.0075	0.0056
Mercury	40826-12-31 00:00 G	16632814.34	16632814.50	16632814.68	0.0075	0.0036
Mercury	40827-03-29 02:38 G	16632902.42	16632902.61	16632902.81	0.0075	0.0017
Mercury	40827-06-25 05:17 G	16632990.53	16632990.72	16632990.92	0.0075	0.0003
Mercury	40827-09-21 07:41 G	16633078.64	16633078.82	16633079.02	0.0075	0.0023
Mercury	40827-12-18 10:05 G	16633166.77	16633166.92	16633167.09	0.0074	0.0043
Mercury	40828-03-15 12:43 G	16633254.93	16633255.03	16633255.15	0.0074	0.0062
Mars	40972-07-23 20:53 G	16685980.22	16685980.37	16685980.60	0.0063	0.0049
Venus	40975-04-04 13:41 G	16686964.98	16686965.07	16686965.21	0.0064	0.0055
Venus	40975-11-15 18:00 G	16687190.03	16687190.25	16687190.46	0.0064	0.0013
Venus	40976-06-27 21:07 G	16687415.21	16687415.38	16687415.60	0.0064	0.0029
Earth	40981-07-04 00:58 G	16689247.29	16689247.54	16689247.80	0.0066	0.0012

Moon	40981-07-04 01:55 G	16689247.32	16689247.58	16689247.85	0.0066	0.0009	*
Mercury	40988-01-06 19:41 G	16691625.27	16691625.32	16691625.39	0.0069	0.0061	
Mercury	40988-04-03 20:24 G	16691713.27	16691713.35	16691713.44	0.0069	0.0051	
Mercury	40988-06-30 20:53 G	16691801.27	16691801.37	16691801.48	0.0069	0.0041	
Mercury	40988-09-26 21:22 G	16691889.28	16691889.39	16691889.51	0.0069	0.0031	
Mercury	40988-12-23 22:05 G	16691977.29	16691977.42	16691977.54	0.0069	0.0020	
Mercury	40989-03-21 22:34 G	16692065.31	16692065.44	16692065.57	0.0069	0.0010	
Mercury	40989-06-17 23:02 G	16692153.33	16692153.46	16692153.60	0.0069	0.0002	
Mercury	40989-09-13 23:31 G	16692241.36	16692241.48	16692241.62	0.0069	0.0011	
Mercury	40989-12-11 00:00 G	16692329.38	16692329.50	16692329.63	0.0069	0.0022	
Mercury	40990-03-09 00:43 G	16692417.41	16692417.53	16692417.65	0.0069	0.0032	
Mercury	40990-06-05 01:12 G	16692505.45	16692505.55	16692505.66	0.0070	0.0043	
Mercury	40990-09-01 01:26 G	16692593.49	16692593.56	16692593.66	0.0070	0.0054	
Mercury	40990-11-28 02:10 G	16692681.55	16692681.59	16692681.65	0.0070	0.0064	

# 42ND MILLENNIUM CE

This is a list of transits visible from Pluto in the 42nd millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	41064-10-08 13:26 G		16719658.98	16719659.06	16719659.18	0.0080	0.0071	
Venus	41065-05-22 00:14 G		16719884.29	16719884.51	16719884.73	0.0080	0.0013	
Earth	41069-01-05 14:53 G		16721208.87	16721209.12	16721209.38	0.0078	0.0008	
Moon	41069-01-05 17:31 G		16721208.98	16721209.23	16721209.48	0.0078	0.0004	*

Mercury	41074-05-09 03:36 G	16723158.56	16723158.65	16723158.77	0.0075	0.0064
Mercury	41074-08-05 06:14 G	16723246.61	16723246.76	16723246.93	0.0075	0.0044
Mercury	41074-11-01 09:07 G	16723334.69	16723334.88	16723335.06	0.0075	0.0024
Mercury	41075-01-28 11:31 G	16723422.79	16723422.98	16723423.18	0.0075	0.0005
Mercury	41075-04-26 14:10 G	16723510.90	16723511.09	16723511.28	0.0075	0.0015
Mercury	41075-07-23 16:34 G	16723599.02	16723599.19	16723599.37	0.0075	0.0035
Mercury	41075-10-19 18:43 G	16723687.17	16723687.28	16723687.44	0.0074	0.0055
Mercury	41076-01-15 21:22 G	16723775.38	16723775.39	16723775.43	0.0074	0.0073
Venus	41223-03-10 01:55 G	16777519.43	16777519.58	16777519.78	0.0064	0.0040
Venus	41223-10-21 06:14 G	16777744.54	16777744.76	16777744.98	0.0064	0.0002
Venus	41224-06-02 09:36 G	16777969.76	16777969.90	16777970.08	0.0064	0.0044
Earth	41229-07-07 20:24 G	16779831.09	16779831.35	16779831.61	0.0066	0.0003
Moon	41229-07-07 20:24 G	16779831.10	16779831.35	16779831.60	0.0066	0.0002 *
Mercury	41235-08-12 04:48 G	16782057.69	16782057.70	16782057.73	0.0068	0.0068
Mercury	41235-11-08 05:17 G	16782145.66	16782145.72	16782145.80	0.0069	0.0058
Mercury	41236-02-04 05:46 G	16782233.66	16782233.74	16782233.85	0.0069	0.0048
Mercury	41236-05-02 06:29 G	16782321.66	16782321.77	16782321.88	0.0069	0.0037
Mercury	41236-07-29 06:58 G	16782409.68	16782409.79	16782409.92	0.0069	0.0027
Mercury	41236-10-25 07:41 G	16782497.69	16782497.82	16782497.95	0.0069	0.0016
Mercury	41237-01-21 08:10 G	16782585.71	16782585.84	16782585.97	0.0069	0.0006
Mercury	41237-04-19 08:38 G	16782673.73	16782673.86	16782674.00	0.0069	0.0005
Mercury	41237-07-16 09:07 G	16782761.76	16782761.88	16782762.02	0.0069	0.0015
Mercury	41237-10-12 09:50 G	16782849.79	16782849.91	16782850.03	0.0069	0.0025
Mercury	41238-01-08 10:05 G	16782937.82	16782937.92	16782938.04	0.0070	0.0037
Mercury	41238-04-06 10:48 G	16783025.86	16783025.95	16783026.05	0.0070	0.0047
Mercury	41238-07-03 11:17 G	16783113.91	16783113.97	16783114.05	0.0070	0.0058
Mercury	41238-09-29 12:00 G	16783201.98	16783202.00	16783202.03	0.0070	0.0068
Venus	41312-09-13 03:07 G	16810213.46	16810213.63	16810213.83	0.0080	0.0045
Venus	41313-04-26 13:26 G	16810438.89	16810439.06	16810439.27	0.0080	0.0040
Moon	41317-01-09 11:02 G	16811792.71	16811792.96	16811793.22	0.0078	0.0018

Earth	41317-01-09 13:55 G	16811792.84	16811793.08	16811793.35	0.0078	0.0019	*
Mercury	41322-03-10 11:31 G	16813678.88	16813678.98	16813679.13	0.0075	0.0058	
Mercury	41322-06-06 14:24 G	16813766.94	16813767.10	16813767.28	0.0075	0.0037	
Mercury	41322-09-02 17:02 G	16813855.03	16813855.21	16813855.41	0.0075	0.0017	
Mercury	41322-11-29 19:41 G	16813943.13	16813943.32	16813943.52	0.0075	0.0003	
Mercury	41323-02-25 22:05 G	16814031.24	16814031.42	16814031.62	0.0075	0.0023	
Mercury	41323-05-25 00:43 G	16814119.37	16814119.53	16814119.70	0.0075	0.0042	
Mercury	41323-08-21 02:53 G	16814207.53	16814207.62	16814207.75	0.0074	0.0062	
Venus	41471-02-12 12:58 G	16868073.86	16868074.04	16868074.25	0.0064	0.0029	
Venus	41471-09-25 17:02 G	16868299.00	16868299.21	16868299.43	0.0064	0.0013	
Venus	41472-05-07 20:24 G	16868524.26	16868524.35	16868524.49	0.0064	0.0055	
Moon	41477-07-11 12:43 G	16870414.76	16870415.03	16870415.30	0.0066	0.0007	
Earth	41477-07-11 13:41 G	16870414.83	16870415.07	16870415.34	0.0066	0.0011	*
Mercury	41483-06-13 13:55 G	16872578.07	16872578.08	16872578.12	0.0068	0.0067	
Mercury	41483-09-09 14:24 G	16872666.04	16872666.10	16872666.19	0.0068	0.0057	
Mercury	41483-12-06 15:07 G	16872754.04	16872754.13	16872754.23	0.0069	0.0046	
Mercury	41484-03-03 15:50 G	16872842.05	16872842.16	16872842.27	0.0069	0.0036	
Mercury	41484-05-30 16:19 G	16872930.06	16872930.18	16872930.30	0.0069	0.0026	
Mercury	41484-08-26 16:48 G	16873018.08	16873018.20	16873018.33	0.0069	0.0016	
Mercury	41484-11-22 17:31 G	16873106.09	16873106.23	16873106.36	0.0069	0.0005	
Mercury	41485-02-18 18:00 G	16873194.12	16873194.25	16873194.38	0.0069	0.0005	
Mercury	41485-05-17 18:29 G	16873282.14	16873282.27	16873282.40	0.0069	0.0016	
Mercury	41485-08-13 18:58 G	16873370.17	16873370.29	16873370.42	0.0069	0.0027	
Mercury	41485-11-09 19:26 G	16873458.21	16873458.31	16873458.43	0.0069	0.0037	
Mercury	41486-02-05 20:10 G	16873546.25	16873546.34	16873546.44	0.0070	0.0048	
Mercury	41486-05-04 20:24 G	16873634.30	16873634.35	16873634.43	0.0070	0.0059	
Mercury	41486-07-31 21:07 G	16873722.38	16873722.38	16873722.40	0.0070	0.0069	
Venus	41560-08-18 13:41 G	16900767.88	16900768.07	16900768.29	0.0080	0.0034	
Venus	41561-04-01 00:14 G	16900993.35	16900993.51	16900993.69	0.0080	0.0050	
Earth	41565-01-13 08:10 G	16902376.61	16902376.84	16902377.09	0.0078	0.0028	



Moon	41565-01-13 11:46 G	16902376.75	16902376.99	16902377.24	0.0078	0.0024 *
Mercury	41570-01-09 18:29 G	16904199.15	16904199.27	16904199.39	0.0075	0.0060
Mercury	41570-04-07 20:38 G	16904287.21	16904287.36	16904287.54	0.0075	0.0040
Mercury	41570-07-04 23:17 G	16904375.29	16904375.47	16904375.67	0.0075	0.0020
Mercury	41570-10-01 02:10 G	16904463.39	16904463.59	16904463.79	0.0075	0.0000
Mercury	41570-12-28 04:34 G	16904551.51	16904551.69	16904551.88	0.0075	0.0020
Mercury	41571-03-26 06:43 G	16904639.63	16904639.78	16904639.97	0.0075	0.0040
Mercury	41571-06-22 09:36 G	16904727.79	16904727.90	16904728.02	0.0074	0.0059
Mars	41715-07-06 09:07 G	16957336.73	16957336.88	16957337.08	0.0062	0.0051
Venus	41719-01-17 22:05 G	16958628.24	16958628.42	16958628.64	0.0064	0.0026
Venus	41719-08-31 02:10 G	16958853.38	16958853.59	16958853.81	0.0064	0.0016
Venus	41720-04-12 05:31 G	16959078.66	16959078.73	16959078.85	0.0064	0.0058
Earth	41725-07-15 04:05 G	16960998.42	16960998.67	16960998.93	0.0066	0.0009
Moon	41725-07-15 06:43 G	16960998.53	16960998.78	16960999.03	0.0066	0.0009 *
Mercury	41731-07-11 23:02 G	16963186.42	16963186.46	16963186.54	0.0068	0.0061
Mercury	41731-10-08 00:00 G	16963274.41	16963274.50	16963274.59	0.0069	0.0050
Mercury	41732-01-04 00:14 G	16963362.41	16963362.51	16963362.63	0.0069	0.0040
Mercury	41732-04-01 00:43 G	16963450.42	16963450.53	16963450.66	0.0069	0.0030
Mercury	41732-06-28 01:26 G	16963538.44	16963538.56	16963538.69	0.0069	0.0019
Mercury	41732-09-24 02:10 G	16963626.46	16963626.59	16963626.72	0.0069	0.0009
Mercury	41732-12-21 02:38 G	16963714.48	16963714.61	16963714.74	0.0069	0.0002
Mercury	41733-03-19 03:07 G	16963802.50	16963802.63	16963802.76	0.0069	0.0012
Mercury	41733-06-15 03:36 G	16963890.53	16963890.65	16963890.78	0.0069	0.0023
Mercury	41733-09-11 04:05 G	16963978.56	16963978.67	16963978.79	0.0069	0.0034
Mercury	41733-12-08 04:34 G	16964066.60	16964066.69	16964066.80	0.0070	0.0044
Mercury	41734-03-06 05:17 G	16964154.65	16964154.72	16964154.80	0.0070	0.0055
Mercury	41734-06-02 05:46 G	16964242.71	16964242.74	16964242.79	0.0070	0.0066
Mars	41806-08-24 15:50 G	16990622.86	16990623.16	16990623.50	0.0081	0.0025
Venus	41808-07-23 22:48 G	16991322.24	16991322.45	16991322.66	0.0080	0.0030
Venus	41809-03-06 08:38 G	16991547.72	16991547.86	16991548.04	0.0080	0.0054

Moon	41813-01-16 20:10 G	16992960.13	16992960.34	16992960.60	0.0078	0.0030
Earth	41813-01-17 00:00 G	16992960.26	16992960.50	16992960.74	0.0078	0.0030 *
Mercury	41817-11-11 00:00 G	16994719.42	16994719.50	16994719.60	0.0075	0.0066
Mercury	41818-02-07 02:38 G	16994807.46	16994807.61	16994807.77	0.0075	0.0046
Mercury	41818-05-06 05:17 G	16994895.54	16994895.72	16994895.91	0.0075	0.0026
Mercury	41818-08-02 07:55 G	16994983.63	16994983.83	16994984.03	0.0075	0.0007
Mercury	41818-10-29 10:19 G	16995071.74	16995071.93	16995072.13	0.0075	0.0013
Mercury	41819-01-25 12:58 G	16995159.87	16995160.04	16995160.22	0.0075	0.0033
Mercury	41819-04-23 15:07 G	16995248.01	16995248.13	16995248.29	0.0074	0.0053
Mercury	41819-07-20 17:46 G	16995336.20	16995336.24	16995336.30	0.0074	0.0072
Mars	41963-10-16 09:50 G	17048018.70	17048018.91	17048019.16	0.0062	0.0040
Venus	41966-12-23 06:00 G	17049182.55	17049182.75	17049182.95	0.0063	0.0028
Venus	41967-08-05 09:36 G	17049407.69	17049407.90	17049408.12	0.0064	0.0013
Venus	41968-03-17 12:43 G	17049632.95	17049633.03	17049633.17	0.0064	0.0055
Moon	41973-07-18 12:00 G	17051581.75	17051582.00	17051582.27	0.0066	0.0004
Earth	41973-07-18 15:22 G	17051581.88	17051582.14	17051582.40	0.0066	0.0001 *
Mercury	41979-05-13 07:26 G	17053706.80	17053706.81	17053706.83	0.0068	0.0068
Mercury	41979-08-09 07:55 G	17053794.77	17053794.83	17053794.91	0.0068	0.0058
Mercury	41979-11-05 08:24 G	17053882.77	17053882.85	17053882.96	0.0068	0.0048
Mercury	41980-02-01 09:07 G	17053970.77	17053970.88	17053971.00	0.0069	0.0037
Mercury	41980-04-29 09:36 G	17054058.79	17054058.90	17054059.03	0.0069	0.0027
Mercury	41980-07-26 10:05 G	17054146.80	17054146.92	17054147.06	0.0069	0.0017
Mercury	41980-10-22 10:48 G	17054234.82	17054234.95	17054235.08	0.0069	0.0006
Mercury	41981-01-18 11:17 G	17054322.84	17054322.97	17054323.11	0.0069	0.0005
Mercury	41981-04-16 11:46 G	17054410.87	17054410.99	17054411.13	0.0069	0.0015
Mercury	41981-07-13 12:29 G	17054498.90	17054499.02	17054499.14	0.0069	0.0026
Mercury	41981-10-09 12:43 G	17054586.93	17054587.03	17054587.15	0.0069	0.0037
Mercury	41982-01-05 13:12 G	17054674.97	17054675.05	17054675.16	0.0069	0.0048
Mercury	41982-04-03 13:55 G	17054763.02	17054763.08	17054763.16	0.0070	0.0058
Mercury	41982-06-30 14:24 G	17054851.09	17054851.10	17054851.13	0.0070	0.0069

# 43RD MILLENNIUM CE

This is a list of transits visible from Pluto in the 43rd millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mars	42054-12-03 12:29	G	17081304.69	17081305.02	17081305.36	0.0081	0.0005	
Venus	42056-06-27 03:50	G	17081876.48	17081876.66	17081876.85	0.0080	0.0045	
Venus	42057-02-07 13:55	G	17082101.90	17082102.08	17082102.29	0.0080	0.0039	
Earth	42061-01-19 09:36	G	17083543.66	17083543.90	17083544.17	0.0078	0.0012	
Moon	42061-01-19 12:43	G	17083543.79	17083544.03	17083544.30	0.0078	0.0016	*
Mercury	42065-12-08 06:29	G	17085327.68	17085327.77	17085327.88	0.0075	0.0065	
Mercury	42066-03-06 09:07	G	17085415.73	17085415.88	17085416.04	0.0075	0.0044	
Mercury	42066-06-02 11:31	G	17085503.81	17085503.98	17085504.18	0.0075	0.0025	
Mercury	42066-08-29 14:24	G	17085591.90	17085592.10	17085592.29	0.0075	0.0005	
Mercury	42066-11-25 16:48	G	17085680.01	17085680.20	17085680.40	0.0075	0.0015	
Mercury	42067-02-21 19:12	G	17085768.13	17085768.30	17085768.48	0.0075	0.0035	
Mercury	42067-05-20 21:22	G	17085856.28	17085856.39	17085856.55	0.0074	0.0055	
Mercury	42067-08-17 00:00	G	17085944.49	17085944.50	17085944.54	0.0074	0.0074	
Mars	42212-01-26 05:46	G	17138700.52	17138700.74	17138700.98	0.0062	0.0040	
Venus	42214-11-27 11:17	G	17139736.81	17139736.97	17139737.17	0.0063	0.0038	
Venus	42215-07-10 15:22	G	17139961.92	17139962.14	17139962.36	0.0064	0.0004	
Venus	42216-02-20 18:43	G	17140187.14	17140187.28	17140187.45	0.0064	0.0045	
Earth	42221-07-21 23:31	G	17142165.25	17142165.48	17142165.75	0.0066	0.0018	

Moon	42221-07-22 03:22 G	17142165.40	17142165.64	17142165.90	0.0066	0.0017	*
Mercury	42227-09-06 16:19 G	17144403.12	17144403.18	17144403.25	0.0068	0.0059	
Mercury	42227-12-03 16:34 G	17144491.11	17144491.19	17144491.30	0.0068	0.0049	
Mercury	42228-02-29 17:17 G	17144579.12	17144579.22	17144579.34	0.0069	0.0038	
Mercury	42228-05-27 18:00 G	17144667.13	17144667.25	17144667.37	0.0069	0.0028	
Mercury	42228-08-23 18:29 G	17144755.14	17144755.27	17144755.40	0.0069	0.0018	
Mercury	42228-11-19 18:58 G	17144843.16	17144843.29	17144843.43	0.0069	0.0008	
Mercury	42229-02-15 19:41 G	17144931.19	17144931.32	17144931.45	0.0069	0.0004	
Mercury	42229-05-14 20:10 G	17145019.21	17145019.34	17145019.47	0.0069	0.0014	
Mercury	42229-08-10 20:38 G	17145107.24	17145107.36	17145107.49	0.0069	0.0025	
Mercury	42229-11-06 21:07 G	17145195.27	17145195.38	17145195.50	0.0069	0.0035	
Mercury	42230-02-02 21:50 G	17145283.31	17145283.41	17145283.51	0.0069	0.0046	
Mercury	42230-05-01 22:05 G	17145371.36	17145371.42	17145371.51	0.0070	0.0057	
Mercury	42230-07-28 22:34 G	17145459.43	17145459.44	17145459.48	0.0070	0.0068	
Mars	42303-03-16 02:53 G	17171986.31	17171986.62	17171986.96	0.0081	0.0020	
Venus	42304-06-02 06:58 G	17172430.69	17172430.79	17172430.93	0.0080	0.0067	
Venus	42305-01-13 18:00 G	17172656.03	17172656.25	17172656.46	0.0080	0.0018	
Moon	42309-01-23 16:05 G	17174126.93	17174127.17	17174127.43	0.0078	0.0012	
Earth	42309-01-23 17:31 G	17174126.98	17174127.23	17174127.49	0.0078	0.0013	*
Mercury	42314-01-06 12:14 G	17175935.93	17175936.01	17175936.11	0.0075	0.0066	
Mercury	42314-04-04 14:53 G	17176023.98	17176024.12	17176024.28	0.0075	0.0046	
Mercury	42314-07-01 17:31 G	17176112.05	17176112.23	17176112.42	0.0075	0.0026	
Mercury	42314-09-27 20:10 G	17176200.15	17176200.34	17176200.54	0.0075	0.0006	
Mercury	42314-12-24 22:34 G	17176288.25	17176288.44	17176288.64	0.0075	0.0014	
Mercury	42315-03-23 00:43 G	17176376.38	17176376.53	17176376.73	0.0075	0.0034	
Mercury	42315-06-19 03:36 G	17176464.52	17176464.65	17176464.79	0.0074	0.0053	
Mercury	42315-09-15 05:46 G	17176552.72	17176552.74	17176552.80	0.0074	0.0072	
Mars	42460-05-05 20:38 G	17229382.20	17229382.36	17229382.57	0.0062	0.0049	
Venus	42462-10-31 15:07 G	17230291.04	17230291.13	17230291.29	0.0063	0.0053	
Venus	42463-06-13 19:26 G	17230516.10	17230516.31	17230516.53	0.0063	0.0012	

Venus	42464-01-24 22:48 G	17230741.27	17230741.45	17230741.66	0.0064	0.0030
Moon	42469-07-24 01:55 G	17232748.40	17232748.58	17232748.77	0.0066	0.0046
Earth	42469-07-24 05:02 G	17232748.53	17232748.71	17232748.92	0.0066	0.0043 *
Earth	42470-07-25 18:29 G	17233115.11	17233115.27	17233115.48	0.0066	0.0048
Moon	42470-07-25 20:53 G	17233115.21	17233115.37	17233115.55	0.0066	0.0051 *
Mercury	42475-10-04 00:00 G	17235011.46	17235011.50	17235011.55	0.0068	0.0064
Mercury	42475-12-31 00:29 G	17235099.44	17235099.52	17235099.61	0.0068	0.0054
Mercury	42476-03-28 00:58 G	17235187.45	17235187.54	17235187.65	0.0068	0.0044
Mercury	42476-06-24 01:26 G	17235275.45	17235275.56	17235275.69	0.0069	0.0034
Mercury	42476-09-20 02:10 G	17235363.47	17235363.59	17235363.72	0.0069	0.0023
Mercury	42476-12-17 02:38 G	17235451.48	17235451.61	17235451.75	0.0069	0.0013
Mercury	42477-03-15 03:22 G	17235539.51	17235539.64	17235539.77	0.0069	0.0002
Mercury	42477-06-11 03:50 G	17235627.53	17235627.66	17235627.79	0.0069	0.0009
Mercury	42477-09-07 04:19 G	17235715.56	17235715.68	17235715.81	0.0069	0.0019
Mercury	42477-12-04 05:02 G	17235803.59	17235803.71	17235803.83	0.0069	0.0030
Mercury	42478-03-02 05:17 G	17235891.62	17235891.72	17235891.84	0.0069	0.0041
Mercury	42478-05-29 05:46 G	17235979.67	17235979.74	17235979.84	0.0069	0.0052
Mercury	42478-08-25 06:29 G	17236067.72	17236067.77	17236067.83	0.0070	0.0062
Mars	42551-06-24 03:36 G	17262667.31	17262667.65	17262667.98	0.0081	0.0001
Venus	42552-12-17 17:17 G	17263210.02	17263210.22	17263210.45	0.0080	0.0023
Venus	42553-07-31 03:50 G	17263435.52	17263435.66	17263435.81	0.0080	0.0060
Earth	42557-01-25 18:43 G	17264710.14	17264710.28	17264710.48	0.0078	0.0060
Moon	42557-01-25 19:12 G	17264710.17	17264710.30	17264710.49	0.0078	0.0062 *
Mercury	42562-05-01 18:58 G	17266632.18	17266632.29	17266632.42	0.0075	0.0059
Mercury	42562-07-28 21:36 G	17266720.24	17266720.40	17266720.57	0.0075	0.0039
Mercury	42562-10-25 00:14 G	17266808.32	17266808.51	17266808.70	0.0075	0.0019
Mercury	42563-01-21 02:38 G	17266896.42	17266896.61	17266896.81	0.0075	0.0002
Mercury	42563-04-19 05:02 G	17266984.53	17266984.71	17266984.91	0.0075	0.0020
Mercury	42563-07-16 07:41 G	17267072.66	17267072.82	17267072.99	0.0075	0.0040
Mercury	42563-10-12 09:50 G	17267160.81	17267160.91	17267161.04	0.0074	0.0060

Venus	42711-05-19 22:05 G	17321070.25	17321070.42	17321070.63	0.0063	0.0032
Venus	42711-12-31 02:10 G	17321295.37	17321295.59	17321295.81	0.0064	0.0009
Venus	42712-08-12 05:17 G	17321520.62	17321520.72	17321520.88	0.0064	0.0051
Moon	42718-07-29 22:05 G	17323698.19	17323698.42	17323698.68	0.0066	0.0016
Earth	42718-07-29 22:48 G	17323698.19	17323698.45	17323698.70	0.0066	0.0015 *
Mercury	42724-01-29 07:41 G	17325707.78	17325707.82	17325707.89	0.0068	0.0062
Mercury	42724-04-26 08:10 G	17325795.77	17325795.84	17325795.94	0.0068	0.0052
Mercury	42724-07-23 08:53 G	17325883.77	17325883.87	17325883.98	0.0068	0.0041
Mercury	42724-10-19 09:22 G	17325971.78	17325971.89	17325972.02	0.0069	0.0031
Mercury	42725-01-15 10:05 G	17326059.80	17326059.92	17326060.05	0.0069	0.0020
Mercury	42725-04-13 10:34 G	17326147.82	17326147.94	17326148.08	0.0069	0.0010
Mercury	42725-07-10 11:17 G	17326235.84	17326235.97	17326236.10	0.0069	0.0001
Mercury	42725-10-06 11:46 G	17326323.86	17326323.99	17326324.12	0.0069	0.0011
Mercury	42726-01-02 12:14 G	17326411.89	17326412.01	17326412.14	0.0069	0.0022
Mercury	42726-03-31 12:58 G	17326499.92	17326500.04	17326500.16	0.0069	0.0032
Mercury	42726-06-27 13:12 G	17326587.96	17326588.05	17326588.16	0.0069	0.0044
Mercury	42726-09-23 13:41 G	17326676.00	17326676.07	17326676.17	0.0069	0.0055
Mercury	42726-12-20 14:24 G	17326764.06	17326764.10	17326764.15	0.0070	0.0065
Mars	42799-10-03 02:38 G	17353348.31	17353348.61	17353348.94	0.0081	0.0025
Venus	42800-11-21 16:34 G	17353764.07	17353764.19	17353764.32	0.0081	0.0066
Venus	42801-07-05 03:07 G	17353989.42	17353989.63	17353989.85	0.0080	0.0018
Moon	42806-01-30 18:58 G	17355660.09	17355660.29	17355660.53	0.0078	0.0044
Earth	42806-01-30 22:19 G	17355660.22	17355660.43	17355660.65	0.0078	0.0043 *
Mercury	42810-05-29 22:19 G	17357240.42	17357240.43	17357240.48	0.0075	0.0075
Mercury	42810-08-26 00:58 G	17357328.42	17357328.54	17357328.69	0.0075	0.0054
Mercury	42810-11-22 03:36 G	17357416.49	17357416.65	17357416.84	0.0075	0.0034
Mercury	42811-02-18 06:14 G	17357504.58	17357504.76	17357504.96	0.0075	0.0014
Mercury	42811-05-17 08:53 G	17357592.68	17357592.87	17357593.07	0.0075	0.0006
Mercury	42811-08-13 11:17 G	17357680.79	17357680.97	17357681.16	0.0075	0.0026
Mercury	42811-11-09 13:26 G	17357768.93	17357769.06	17357769.24	0.0075	0.0046

Mercury	42812-02-05 16:19 G	17357857.09	17357857.18	17357857.28	0.0074	0.0065
Venus	42959-04-23 00:00 G	17411624.41	17411624.50	17411624.62	0.0063	0.0056
Venus	42959-12-04 03:36 G	17411849.45	17411849.65	17411849.88	0.0063	0.0016
Venus	42960-07-16 07:12 G	17412074.61	17412074.80	17412075.02	0.0064	0.0026
Moon	42966-07-31 21:36 G	17414281.18	17414281.40	17414281.67	0.0066	0.0027
Earth	42966-07-31 23:17 G	17414281.23	17414281.47	17414281.72	0.0066	0.0023 *
Mercury	42972-05-23 15:22 G	17416404.09	17416404.14	17416404.20	0.0068	0.0062
Mercury	42972-08-19 15:50 G	17416492.08	17416492.16	17416492.25	0.0068	0.0052
Mercury	42972-11-15 16:19 G	17416580.08	17416580.18	17416580.29	0.0068	0.0042
Mercury	42973-02-11 17:02 G	17416668.09	17416668.21	17416668.33	0.0069	0.0032
Mercury	42973-05-10 17:31 G	17416756.11	17416756.23	17416756.36	0.0069	0.0021
Mercury	42973-08-06 18:14 G	17416844.13	17416844.26	17416844.39	0.0069	0.0011
Mercury	42973-11-02 18:43 G	17416932.15	17416932.28	17416932.41	0.0069	0.0001
Mercury	42974-01-29 19:12 G	17417020.17	17417020.30	17417020.43	0.0069	0.0010
Mercury	42974-04-27 19:41 G	17417108.20	17417108.32	17417108.45	0.0069	0.0021
Mercury	42974-07-24 20:10 G	17417196.23	17417196.34	17417196.47	0.0069	0.0032
Mercury	42974-10-20 20:38 G	17417284.27	17417284.36	17417284.48	0.0069	0.0042
Mercury	42975-01-16 21:22 G	17417372.31	17417372.39	17417372.48	0.0069	0.0053
Mercury	42975-04-14 21:50 G	17417460.37	17417460.41	17417460.47	0.0069	0.0064

# 44TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 44th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Venus	43049-06-08 22:19 G	17444543.26	17444543.43	17444543.63	0.0080	0.0043
Venus	43050-01-20 08:38 G	17444768.69	17444768.86	17444769.07	0.0080	0.0041
Earth	43054-02-02 17:31 G	17446242.99	17446243.23	17446243.49	0.0078	0.0024
Moon	43054-02-02 20:53 G	17446243.15	17446243.37	17446243.63	0.0078	0.0028 *
Mercury	43058-12-20 05:31 G	17448024.63	17448024.73	17448024.87	0.0075	0.0060
Mercury	43059-03-18 08:10 G	17448112.69	17448112.84	17448113.02	0.0075	0.0040
Mercury	43059-06-14 11:02 G	17448200.77	17448200.96	17448201.15	0.0075	0.0019
Mercury	43059-09-10 13:41 G	17448288.87	17448289.07	17448289.26	0.0075	0.0001
Mercury	43059-12-07 15:50 G	17448376.98	17448377.16	17448377.36	0.0075	0.0021
Mercury	43060-03-04 18:14 G	17448465.11	17448465.26	17448465.44	0.0075	0.0041
Mercury	43060-05-31 21:07 G	17448553.26	17448553.38	17448553.49	0.0074	0.0060
Venus	43207-11-08 04:19 G	17502403.54	17502403.68	17502403.87	0.0063	0.0043
Venus	43208-06-20 08:38 G	17502628.64	17502628.86	17502629.08	0.0063	0.0002
Venus	43209-01-31 11:46 G	17502853.84	17502853.99	17502854.19	0.0064	0.0040
Earth	43214-08-03 22:48 G	17504864.42	17504864.45	17504864.54	0.0066	0.0064
Moon	43214-08-04 01:41 G	17504864.54	17504864.57	17504864.67	0.0066	0.0064 *
Moon	43215-08-05 09:36 G	17505230.68	17505230.90	17505231.16	0.0066	0.0026
Earth	43215-08-05 12:58 G	17505230.82	17505231.04	17505231.30	0.0066	0.0027 *
Mercury	43220-09-16 22:34 G	17507100.41	17507100.44	17507100.50	0.0068	0.0065
Mercury	43220-12-13 23:02 G	17507188.40	17507188.46	17507188.56	0.0068	0.0055
Mercury	43221-03-12 00:00 G	17507276.40	17507276.50	17507276.60	0.0068	0.0044
Mercury	43221-06-08 00:14 G	17507364.41	17507364.51	17507364.64	0.0068	0.0034
Mercury	43221-09-04 00:43 G	17507452.42	17507452.53	17507452.67	0.0069	0.0024
Mercury	43221-12-01 01:26 G	17507540.43	17507540.56	17507540.70	0.0069	0.0013
Mercury	43222-02-27 02:10 G	17507628.46	17507628.59	17507628.72	0.0069	0.0002
Mercury	43222-05-26 02:38 G	17507716.48	17507716.61	17507716.74	0.0069	0.0008
Mercury	43222-08-22 03:07 G	17507804.51	17507804.63	17507804.76	0.0069	0.0019
Mercury	43222-11-18 03:50 G	17507892.54	17507892.66	17507892.78	0.0069	0.0030
Mercury	43223-02-14 04:05 G	17507980.57	17507980.67	17507980.79	0.0069	0.0041



Mercury	43223-05-13 04:34 G	17508068.62	17508068.69	17508068.79	0.0069	0.0051
Mercury	43223-08-09 05:17 G	17508156.67	17508156.72	17508156.79	0.0069	0.0062
Venus	43297-12-24 05:17 G	17535322.51	17535322.72	17535322.94	0.0080	0.0016
Venus	43298-08-06 15:07 G	17535548.04	17535548.13	17535548.28	0.0080	0.0067
Earth	43303-02-07 15:50 G	17537193.02	17537193.16	17537193.32	0.0078	0.0062
Moon	43303-02-07 18:14 G	17537193.12	17537193.26	17537193.42	0.0078	0.0063 *
Mercury	43307-04-15 10:34 G	17538720.85	17538720.94	17538721.06	0.0075	0.0063
Mercury	43307-07-12 13:12 G	17538808.90	17538809.05	17538809.22	0.0075	0.0042
Mercury	43307-10-08 15:50 G	17538896.98	17538897.16	17538897.35	0.0075	0.0022
Mercury	43308-01-04 18:29 G	17538985.07	17538985.27	17538985.46	0.0075	0.0002
Mercury	43308-04-01 20:38 G	17539073.18	17539073.36	17539073.56	0.0075	0.0018
Mercury	43308-06-28 23:02 G	17539161.31	17539161.46	17539161.65	0.0075	0.0038
Mercury	43308-09-25 01:41 G	17539249.46	17539249.57	17539249.70	0.0075	0.0057
Mars	43455-05-06 19:12 G	17592798.07	17592798.30	17592798.58	0.0063	0.0034
Venus	43456-05-25 08:24 G	17593182.68	17593182.85	17593183.06	0.0063	0.0033
Venus	43457-01-05 12:14 G	17593407.80	17593408.01	17593408.24	0.0063	0.0009
Venus	43457-08-18 15:50 G	17593633.03	17593633.16	17593633.31	0.0064	0.0049
Earth	43463-08-08 11:17 G	17595813.73	17595813.97	17595814.22	0.0066	0.0020
Moon	43463-08-08 14:24 G	17595813.88	17595814.10	17595814.37	0.0066	0.0024 *
Mercury	43469-04-09 06:00 G	17597884.70	17597884.75	17597884.83	0.0068	0.0059
Mercury	43469-07-06 06:58 G	17597972.70	17597972.79	17597972.88	0.0068	0.0049
Mercury	43469-10-02 07:12 G	17598060.70	17598060.80	17598060.92	0.0068	0.0039
Mercury	43469-12-29 07:41 G	17598148.71	17598148.82	17598148.96	0.0069	0.0029
Mercury	43470-03-27 08:24 G	17598236.73	17598236.85	17598236.99	0.0069	0.0018
Mercury	43470-06-23 09:07 G	17598324.75	17598324.88	17598325.01	0.0069	0.0007
Mercury	43470-09-19 09:36 G	17598412.77	17598412.90	17598413.03	0.0069	0.0003
Mercury	43470-12-16 10:05 G	17598500.79	17598500.92	17598501.05	0.0069	0.0014
Mercury	43471-03-14 10:48 G	17598588.82	17598588.95	17598589.07	0.0069	0.0024
Mercury	43471-06-10 11:02 G	17598676.86	17598676.96	17598677.08	0.0069	0.0035
Mercury	43471-09-06 11:31 G	17598764.90	17598764.98	17598765.09	0.0069	0.0046

Mercury	43471-12-03 12:14 G	17598852.94	17598853.01	17598853.09	0.0069	0.0057
Mercury	43472-02-29 12:43 G	17598941.01	17598941.03	17598941.07	0.0069	0.0068
Venus	43546-07-12 08:38 G	17626101.65	17626101.86	17626102.09	0.0080	0.0006
Venus	43547-02-22 18:58 G	17626327.25	17626327.29	17626327.35	0.0080	0.0077
Moon	43551-02-10 06:29 G	17627775.55	17627775.77	17627776.03	0.0078	0.0022
Earth	43551-02-10 07:26 G	17627775.56	17627775.81	17627776.06	0.0078	0.0017 *
Mercury	43555-08-09 14:10 G	17629417.08	17629417.09	17629417.12	0.0075	0.0075
Mercury	43555-11-05 16:48 G	17629505.07	17629505.20	17629505.34	0.0075	0.0055
Mercury	43556-02-01 19:12 G	17629593.14	17629593.30	17629593.48	0.0075	0.0035
Mercury	43556-04-29 21:50 G	17629681.22	17629681.41	17629681.61	0.0075	0.0014
Mercury	43556-07-27 00:29 G	17629769.32	17629769.52	17629769.71	0.0075	0.0006
Mercury	43556-10-23 02:38 G	17629857.44	17629857.61	17629857.81	0.0075	0.0026
Mercury	43557-01-19 04:48 G	17629945.57	17629945.70	17629945.88	0.0075	0.0046
Mercury	43557-04-17 07:41 G	17630033.73	17630033.82	17630033.92	0.0074	0.0065
Mars	43703-08-15 22:48 G	17683479.14	17683479.45	17683479.75	0.0063	0.0001
Venus	43704-04-29 08:24 G	17683736.84	17683736.85	17683736.93	0.0063	0.0062
Venus	43704-12-10 12:29 G	17683961.83	17683962.02	17683962.24	0.0063	0.0022
Venus	43705-07-23 16:05 G	17684186.97	17684187.17	17684187.39	0.0063	0.0019
Venus	43706-03-05 19:55 G	17684412.25	17684412.33	17684412.41	0.0064	0.0059
Jupiter	43709-12-19 12:14 G	17685796.84	17685797.01	17685797.24	0.0065	0.0060
Moon	43711-08-11 07:55 G	17686396.78	17686396.83	17686396.88	0.0066	0.0064
Earth	43711-08-11 09:22 G	17686396.87	17686396.89	17686396.95	0.0066	0.0065 *
Earth	43712-08-11 23:02 G	17686763.25	17686763.46	17686763.72	0.0066	0.0026
Moon	43712-08-11 23:46 G	17686763.27	17686763.49	17686763.76	0.0066	0.0025 *
Mercury	43717-08-03 13:26 G	17688581.02	17688581.06	17688581.12	0.0068	0.0063
Mercury	43717-10-30 13:55 G	17688669.01	17688669.08	17688669.17	0.0068	0.0053
Mercury	43718-01-26 14:24 G	17688757.01	17688757.10	17688757.22	0.0068	0.0042
Mercury	43718-04-24 15:07 G	17688845.02	17688845.13	17688845.25	0.0068	0.0032
Mercury	43718-07-21 15:36 G	17688933.03	17688933.15	17688933.28	0.0069	0.0022
Mercury	43718-10-17 16:19 G	17689021.05	17689021.18	17689021.31	0.0069	0.0011

Mercury	43719-01-13 16:48 G	17689109.07	17689109.20	17689109.33	0.0069	0.0001
Mercury	43719-04-11 17:17 G	17689197.09	17689197.22	17689197.35	0.0069	0.0010
Mercury	43719-07-08 17:46 G	17689285.12	17689285.24	17689285.37	0.0069	0.0021
Mercury	43719-10-04 18:29 G	17689373.15	17689373.27	17689373.39	0.0069	0.0031
Mercury	43719-12-31 18:43 G	17689461.19	17689461.28	17689461.40	0.0069	0.0042
Mercury	43720-03-28 19:12 G	17689549.23	17689549.30	17689549.40	0.0069	0.0053
Mercury	43720-06-24 19:55 G	17689637.29	17689637.33	17689637.39	0.0069	0.0064
Venus	43794-06-15 03:07 G	17716655.54	17716655.63	17716655.76	0.0081	0.0070
Venus	43795-01-26 13:55 G	17716880.87	17716881.08	17716881.31	0.0080	0.0014
Earth	43800-02-14 03:07 G	17718725.50	17718725.63	17718725.81	0.0078	0.0062
Moon	43800-02-14 05:46 G	17718725.61	17718725.74	17718725.91	0.0078	0.0062 *
Mercury	43804-02-29 20:38 G	17720201.27	17720201.36	17720201.49	0.0075	0.0063
Mercury	43804-05-27 23:46 G	17720289.33	17720289.49	17720289.65	0.0075	0.0042
Mercury	43804-08-24 02:10 G	17720377.41	17720377.59	17720377.78	0.0075	0.0022
Mercury	43804-11-20 04:48 G	17720465.50	17720465.70	17720465.89	0.0075	0.0002
Mercury	43805-02-16 07:12 G	17720553.61	17720553.80	17720553.99	0.0075	0.0018
Mercury	43805-05-15 09:36 G	17720641.73	17720641.90	17720642.07	0.0075	0.0038
Mercury	43805-08-11 11:46 G	17720729.88	17720729.99	17720730.13	0.0075	0.0058
Mars	43951-11-24 23:17 G	17774160.27	17774160.47	17774160.73	0.0063	0.0041
Venus	43952-11-14 11:31 G	17774515.90	17774515.98	17774516.12	0.0063	0.0055
Venus	43953-06-27 15:36 G	17774740.95	17774741.15	17774741.38	0.0063	0.0015
Venus	43954-02-07 18:58 G	17774966.11	17774966.29	17774966.51	0.0063	0.0026
Earth	43960-08-14 19:55 G	17777346.11	17777346.33	17777346.60	0.0066	0.0025
Moon	43960-08-14 21:36 G	17777346.20	17777346.40	17777346.65	0.0066	0.0028 *
Mercury	43966-02-23 20:38 G	17779365.31	17779365.36	17779365.44	0.0068	0.0059
Mercury	43966-05-22 21:22 G	17779453.30	17779453.39	17779453.49	0.0068	0.0049
Mercury	43966-08-18 21:50 G	17779541.31	17779541.41	17779541.53	0.0068	0.0038
Mercury	43966-11-14 22:34 G	17779629.32	17779629.44	17779629.56	0.0068	0.0028
Mercury	43967-02-10 23:02 G	17779717.33	17779717.46	17779717.59	0.0069	0.0018
Mercury	43967-05-09 23:31 G	17779805.35	17779805.48	17779805.62	0.0069	0.0007

Mercury	43967-08-06 00:14 G	17779893.37	17779893.51	17779893.64	0.0069	0.0004
Mercury	43967-11-02 00:43 G	17779981.40	17779981.53	17779981.66	0.0069	0.0014
Mercury	43968-01-29 00:58 G	17780069.43	17780069.54	17780069.68	0.0069	0.0025
Mercury	43968-04-26 01:41 G	17780157.46	17780157.57	17780157.69	0.0069	0.0035
Mercury	43968-07-23 02:10 G	17780245.50	17780245.59	17780245.70	0.0069	0.0046
Mercury	43968-10-19 02:38 G	17780333.55	17780333.61	17780333.69	0.0069	0.0057
Mercury	43969-01-15 03:22 G	17780421.62	17780421.64	17780421.67	0.0069	0.0068

# 45TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 45th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	44042-12-31 06:00 G		17807434.62	17807434.75	17807434.89	0.0081	0.0063	
Venus	44043-08-13 16:34 G		17807659.98	17807660.19	17807660.41	0.0080	0.0021	
Moon	44048-02-16 13:55 G		17809307.83	17809308.08	17809308.32	0.0078	0.0026	
Earth	44048-02-16 17:31 G		17809307.98	17809308.23	17809308.48	0.0078	0.0022	*
Mercury	44052-09-20 02:38 G		17810985.49	17810985.61	17810985.74	0.0075	0.0057	
Mercury	44052-12-17 05:02 G		17811073.55	17811073.71	17811073.89	0.0075	0.0037	
Mercury	44053-03-15 07:41 G		17811161.63	17811161.82	17811162.01	0.0075	0.0016	
Mercury	44053-06-11 10:05 G		17811249.73	17811249.92	17811250.12	0.0075	0.0004	
Mercury	44053-09-07 12:29 G		17811337.84	17811338.02	17811338.21	0.0075	0.0024	
Mercury	44053-12-04 14:38 G		17811425.97	17811426.11	17811426.29	0.0075	0.0044	
Mercury	44054-03-02 17:31 G		17811514.13	17811514.23	17811514.34	0.0075	0.0063	

Venus	44201-06-01 15:50 G	17865295.02	17865295.16	17865295.33	0.0063	0.0045
Venus	44202-01-12 19:41 G	17865520.10	17865520.32	17865520.54	0.0063	0.0006
Venus	44202-08-25 23:02 G	17865745.29	17865745.46	17865745.65	0.0063	0.0035
Earth	44209-08-19 08:24 G	17868295.61	17868295.85	17868296.10	0.0066	0.0021
Moon	44209-08-19 11:46 G	17868295.76	17868295.99	17868296.25	0.0066	0.0020 *
Mercury	44214-06-20 03:36 G	17870061.62	17870061.65	17870061.72	0.0068	0.0063
Mercury	44214-09-16 04:34 G	17870149.61	17870149.69	17870149.77	0.0068	0.0052
Mercury	44214-12-13 04:48 G	17870237.61	17870237.70	17870237.82	0.0068	0.0043
Mercury	44215-03-11 05:17 G	17870325.62	17870325.72	17870325.85	0.0068	0.0033
Mercury	44215-06-07 06:00 G	17870413.63	17870413.75	17870413.88	0.0069	0.0022
Mercury	44215-09-03 06:43 G	17870501.65	17870501.78	17870501.91	0.0069	0.0011
Mercury	44215-11-30 07:12 G	17870589.67	17870589.80	17870589.94	0.0069	0.0002
Mercury	44216-02-26 07:41 G	17870677.69	17870677.82	17870677.96	0.0069	0.0010
Mercury	44216-05-24 08:10 G	17870765.72	17870765.84	17870765.98	0.0069	0.0021
Mercury	44216-08-20 08:53 G	17870853.75	17870853.87	17870853.99	0.0069	0.0031
Mercury	44216-11-16 09:07 G	17870941.79	17870941.88	17870942.00	0.0069	0.0043
Mercury	44217-02-12 09:36 G	17871029.83	17871029.90	17871030.00	0.0069	0.0053
Mercury	44217-05-11 10:19 G	17871117.89	17871117.93	17871117.99	0.0069	0.0064
Mars	44291-04-20 20:24 G	17898125.05	17898125.35	17898125.69	0.0081	0.0021
Venus	44291-07-18 11:02 G	17898213.79	17898213.96	17898214.16	0.0081	0.0045
Venus	44292-02-28 21:36 G	17898439.22	17898439.40	17898439.60	0.0080	0.0039
Moon	44297-02-20 10:34 G	17900257.79	17900257.94	17900258.14	0.0077	0.0056
Earth	44297-02-20 12:58 G	17900257.89	17900258.04	17900258.25	0.0077	0.0057 *
Mercury	44301-01-15 06:43 G	17901681.69	17901681.78	17901681.89	0.0075	0.0065
Mercury	44301-04-13 09:07 G	17901769.74	17901769.88	17901770.05	0.0075	0.0045
Mercury	44301-07-10 11:46 G	17901857.81	17901857.99	17901858.18	0.0075	0.0024
Mercury	44301-10-06 14:24 G	17901945.91	17901946.10	17901946.30	0.0075	0.0004
Mercury	44302-01-02 16:48 G	17902034.02	17902034.20	17902034.40	0.0075	0.0016
Mercury	44302-03-31 19:12 G	17902122.14	17902122.30	17902122.48	0.0075	0.0036
Mercury	44302-06-27 21:22 G	17902210.28	17902210.39	17902210.54	0.0075	0.0056

Venus	44449-12-16 18:29 G	17956074.12	17956074.27	17956074.46	0.0063	0.0040
Venus	44450-07-29 22:19 G	17956299.22	17956299.43	17956299.66	0.0063	0.0002
Venus	44451-03-12 01:41 G	17956524.42	17956524.57	17956524.75	0.0063	0.0041
Moon	44457-08-21 01:55 G	17958878.37	17958878.58	17958878.81	0.0066	0.0032
Earth	44457-08-21 04:34 G	17958878.48	17958878.69	17958878.95	0.0066	0.0030 *
Earth	44458-08-22 18:29 G	17959245.21	17959245.27	17959245.38	0.0066	0.0063
Moon	44458-08-22 20:38 G	17959245.33	17959245.36	17959245.44	0.0066	0.0065 *
Mercury	44463-01-09 11:02 G	17960845.91	17960845.96	17960846.04	0.0068	0.0059
Mercury	44463-04-07 11:31 G	17960933.90	17960933.98	17960934.09	0.0068	0.0049
Mercury	44463-07-04 12:14 G	17961021.91	17961022.01	17961022.13	0.0068	0.0039
Mercury	44463-09-30 12:43 G	17961109.92	17961110.03	17961110.16	0.0068	0.0029
Mercury	44463-12-27 13:26 G	17961197.93	17961198.06	17961198.19	0.0069	0.0018
Mercury	44464-03-24 13:55 G	17961285.95	17961286.08	17961286.22	0.0069	0.0008
Mercury	44464-06-20 14:38 G	17961373.97	17961374.11	17961374.24	0.0069	0.0003
Mercury	44464-09-16 15:07 G	17961462.00	17961462.13	17961462.26	0.0069	0.0014
Mercury	44464-12-13 15:22 G	17961550.03	17961550.14	17961550.28	0.0069	0.0025
Mercury	44465-03-11 16:05 G	17961638.06	17961638.17	17961638.29	0.0069	0.0035
Mercury	44465-06-07 16:34 G	17961726.10	17961726.19	17961726.30	0.0069	0.0046
Mercury	44465-09-03 17:17 G	17961814.15	17961814.22	17961814.30	0.0069	0.0057
Mercury	44465-11-30 17:46 G	17961902.22	17961902.24	17961902.27	0.0069	0.0068
Mars	44539-07-29 21:07 G	17988805.22	17988805.38	17988805.58	0.0081	0.0067
Venus	44540-02-02 13:55 G	17988992.89	17988993.08	17988993.28	0.0081	0.0038
Venus	44540-09-15 00:00 G	17989218.34	17989218.50	17989218.70	0.0080	0.0046
Moon	44545-02-23 03:22 G	17990840.40	17990840.64	17990840.89	0.0078	0.0030
Earth	44545-02-23 03:22 G	17990840.41	17990840.64	17990840.89	0.0078	0.0027 *
Mercury	44549-08-06 12:00 G	17992465.90	17992466.00	17992466.14	0.0075	0.0060
Mercury	44549-11-02 14:38 G	17992553.96	17992554.11	17992554.29	0.0075	0.0039
Mercury	44550-01-29 17:31 G	17992642.04	17992642.23	17992642.42	0.0075	0.0019
Mercury	44550-04-27 19:55 G	17992730.14	17992730.33	17992730.53	0.0075	0.0002
Mercury	44550-07-24 22:05 G	17992818.25	17992818.42	17992818.62	0.0075	0.0022

Mercury	44550-10-21 00:29 G	17992906.38	17992906.52	17992906.70	0.0075	0.0042
Mercury	44551-01-17 03:22 G	17992994.53	17992994.64	17992994.75	0.0075	0.0061
Venus	44698-07-03 22:48 G	18046853.26	18046853.45	18046853.65	0.0063	0.0029
Mars	44698-08-14 00:00 G	18046894.27	18046894.50	18046894.79	0.0063	0.0032
Venus	44699-02-14 02:24 G	18047078.39	18047078.60	18047078.82	0.0063	0.0010
Venus	44699-09-27 05:31 G	18047303.62	18047303.73	18047303.89	0.0064	0.0051
Earth	44706-08-26 17:17 G	18049827.98	18049828.22	18049828.48	0.0066	0.0018
Moon	44706-08-26 17:02 G	18049827.98	18049828.21	18049828.47	0.0066	0.0015 *
Mercury	44711-05-06 18:14 G	18051542.22	18051542.26	18051542.32	0.0068	0.0063
Mercury	44711-08-02 18:58 G	18051630.21	18051630.29	18051630.38	0.0068	0.0053
Mercury	44711-10-29 19:26 G	18051718.21	18051718.31	18051718.42	0.0068	0.0042
Mercury	44712-01-25 19:55 G	18051806.22	18051806.33	18051806.45	0.0068	0.0032
Mercury	44712-04-22 20:24 G	18051894.23	18051894.35	18051894.49	0.0068	0.0022
Mercury	44712-07-19 21:07 G	18051982.25	18051982.38	18051982.51	0.0069	0.0011
Mercury	44712-10-15 21:36 G	18052070.27	18052070.40	18052070.54	0.0069	0.0002
Mercury	44713-01-11 22:19 G	18052158.30	18052158.43	18052158.56	0.0069	0.0010
Mercury	44713-04-09 22:34 G	18052246.32	18052246.44	18052246.58	0.0069	0.0021
Mercury	44713-07-06 23:17 G	18052334.36	18052334.47	18052334.59	0.0069	0.0031
Mercury	44713-10-02 23:46 G	18052422.39	18052422.49	18052422.60	0.0069	0.0042
Mercury	44713-12-30 00:14 G	18052510.44	18052510.51	18052510.60	0.0069	0.0053
Mercury	44714-03-28 00:58 G	18052598.49	18052598.54	18052598.59	0.0069	0.0064
Venus	44788-08-19 19:12 G	18079772.09	18079772.30	18079772.52	0.0081	0.0019
Venus	44789-04-02 05:17 G	18079997.61	18079997.72	18079997.87	0.0080	0.0064
Moon	44794-02-27 20:38 G	18081790.17	18081790.36	18081790.57	0.0077	0.0051
Earth	44794-02-27 23:17 G	18081790.31	18081790.47	18081790.68	0.0077	0.0054 *
Mercury	44797-11-30 16:19 G	18083162.11	18083162.18	18083162.29	0.0075	0.0067
Mercury	44798-02-26 18:58 G	18083250.15	18083250.29	18083250.46	0.0075	0.0046
Mercury	44798-05-25 21:50 G	18083338.23	18083338.41	18083338.59	0.0075	0.0026
Mercury	44798-08-22 00:14 G	18083426.32	18083426.51	18083426.71	0.0075	0.0006
Mercury	44798-11-18 02:38 G	18083514.43	18083514.61	18083514.81	0.0075	0.0015

Mercury	44799-02-14 04:48 G	18083602.55	18083602.70	18083602.89	0.0075	0.0035
Mercury	44799-05-13 07:12 G	18083690.69	18083690.80	18083690.95	0.0075	0.0055
Mercury	44799-08-09 10:05 G	18083778.90	18083778.92	18083778.94	0.0075	0.0074
Venus	44946-06-07 22:05 G	18137407.42	18137407.42	18137407.43	0.0063	0.0063
Mars	44946-11-23 00:29 G	18137575.22	18137575.52	18137575.82	0.0063	0.0012
Venus	44947-01-19 01:12 G	18137632.37	18137632.55	18137632.77	0.0063	0.0024
Venus	44947-09-01 05:17 G	18137857.50	18137857.72	18137857.93	0.0063	0.0016
Venus	44948-04-13 08:38 G	18138082.77	18138082.86	18138082.97	0.0064	0.0056
Moon	44954-08-28 11:17 G	18140410.77	18140410.97	18140411.22	0.0066	0.0035
Earth	44954-08-28 13:12 G	18140410.85	18140411.05	18140411.30	0.0066	0.0034 *
Earth	44955-08-30 02:53 G	18140777.54	18140777.62	18140777.78	0.0066	0.0060
Moon	44955-08-30 06:14 G	18140777.68	18140777.76	18140777.88	0.0066	0.0061 *
Mercury	44959-11-26 01:41 G	18142326.51	18142326.57	18142326.64	0.0068	0.0059
Mercury	44960-02-22 02:10 G	18142414.51	18142414.59	18142414.69	0.0068	0.0049
Mercury	44960-05-20 02:53 G	18142502.51	18142502.62	18142502.73	0.0068	0.0039
Mercury	44960-08-16 03:07 G	18142590.52	18142590.63	18142590.76	0.0068	0.0029
Mercury	44960-11-12 03:50 G	18142678.53	18142678.66	18142678.79	0.0068	0.0018
Mercury	44961-02-08 04:19 G	18142766.55	18142766.68	18142766.82	0.0069	0.0008
Mercury	44961-05-07 05:02 G	18142854.58	18142854.71	18142854.84	0.0069	0.0003
Mercury	44961-08-03 05:31 G	18142942.60	18142942.73	18142942.86	0.0069	0.0014
Mercury	44961-10-30 06:00 G	18143030.63	18143030.75	18143030.88	0.0069	0.0025
Mercury	44962-01-26 06:29 G	18143118.66	18143118.77	18143118.89	0.0069	0.0035
Mercury	44962-04-24 06:58 G	18143206.70	18143206.79	18143206.90	0.0069	0.0046
Mercury	44962-07-21 07:26 G	18143294.75	18143294.81	18143294.90	0.0069	0.0057
Mercury	44962-10-17 08:24 G	18143382.82	18143382.85	18143382.87	0.0069	0.0068

# 46TH MILLENNIUM CE



**This is a list of transits visible from Pluto in the 46th millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	45037-03-06 22:19	G	18170551.21	18170551.43	18170551.65	0.0081	0.0011	
Venus	45037-10-18 08:38	G	18170776.77	18170776.86	18170776.97	0.0080	0.0072	
Earth	45042-03-02 14:10	G	18172372.86	18172373.09	18172373.34	0.0078	0.0028	
Moon	45042-03-02 17:31	G	18172373.01	18172373.23	18172373.48	0.0078	0.0031	*
Mercury	45046-06-22 22:19	G	18173946.32	18173946.43	18173946.55	0.0075	0.0060	
Mercury	45046-09-19 00:43	G	18174034.38	18174034.53	18174034.70	0.0075	0.0040	
Mercury	45046-12-16 03:22	G	18174122.46	18174122.64	18174122.83	0.0075	0.0019	
Mercury	45047-03-14 06:00	G	18174210.55	18174210.75	18174210.94	0.0075	0.0001	
Mercury	45047-06-10 08:10	G	18174298.66	18174298.84	18174299.04	0.0075	0.0021	
Mercury	45047-09-06 10:34	G	18174386.79	18174386.94	18174387.11	0.0075	0.0041	
Mercury	45047-12-03 12:58	G	18174474.94	18174475.04	18174475.17	0.0075	0.0061	
Venus	45194-12-24 01:41	G	18228186.47	18228186.57	18228186.71	0.0063	0.0053	
Mars	45195-03-04 03:07	G	18228256.47	18228256.63	18228256.85	0.0063	0.0049	
Venus	45195-08-06 05:31	G	18228411.52	18228411.73	18228411.95	0.0063	0.0014	
Venus	45196-03-18 09:07	G	18228636.68	18228636.88	18228637.09	0.0063	0.0026	
Moon	45203-09-01 22:19	G	18231360.19	18231360.43	18231360.70	0.0066	0.0012	
Earth	45203-09-02 02:24	G	18231360.35	18231360.60	18231360.85	0.0066	0.0014	*
Mercury	45208-03-21 08:38	G	18233022.82	18233022.86	18233022.92	0.0068	0.0063	
Mercury	45208-06-17 09:22	G	18233110.81	18233110.89	18233110.98	0.0068	0.0053	
Mercury	45208-09-13 09:50	G	18233198.81	18233198.91	18233199.02	0.0068	0.0042	
Mercury	45208-12-10 10:34	G	18233286.82	18233286.94	18233287.06	0.0068	0.0032	
Mercury	45209-03-08 11:02	G	18233374.83	18233374.96	18233375.09	0.0068	0.0021	

Mercury	45209-06-04 11:31 G	18233462.85	18233462.98	18233463.11	0.0069	0.0011
Mercury	45209-08-31 12:00 G	18233550.87	18233551.00	18233551.14	0.0069	0.0003
Mercury	45209-11-27 12:29 G	18233638.90	18233639.02	18233639.16	0.0069	0.0011
Mercury	45210-02-23 13:12 G	18233726.92	18233727.05	18233727.18	0.0069	0.0021
Mercury	45210-05-22 13:26 G	18233814.96	18233815.06	18233815.19	0.0069	0.0032
Mercury	45210-08-18 14:24 G	18233902.99	18233903.10	18233903.20	0.0069	0.0042
Mercury	45210-11-14 14:38 G	18233991.04	18233991.11	18233991.20	0.0069	0.0054
Mercury	45211-02-10 15:07 G	18234079.10	18234079.13	18234079.19	0.0069	0.0065
Venus	45285-02-07 16:48 G	18261105.13	18261105.20	18261105.29	0.0081	0.0075
Venus	45285-09-21 03:22 G	18261330.43	18261330.64	18261330.87	0.0080	0.0009
Earth	45291-03-06 09:50 G	18263322.75	18263322.91	18263323.12	0.0077	0.0054
Moon	45291-03-06 12:14 G	18263322.82	18263323.01	18263323.23	0.0077	0.0050 *
Mercury	45294-10-16 02:38 G	18264642.53	18264642.61	18264642.70	0.0075	0.0067
Mercury	45295-01-12 05:02 G	18264730.57	18264730.71	18264730.87	0.0075	0.0047
Mercury	45295-04-10 07:26 G	18264818.64	18264818.81	18264819.00	0.0075	0.0027
Mercury	45295-07-07 10:05 G	18264906.73	18264906.92	18264907.12	0.0075	0.0006
Mercury	45295-10-03 12:43 G	18264994.84	18264995.03	18264995.22	0.0075	0.0014
Mercury	45295-12-30 15:07 G	18265082.96	18265083.13	18265083.30	0.0075	0.0034
Mercury	45296-03-27 17:31 G	18265171.10	18265171.23	18265171.37	0.0075	0.0054
Mercury	45296-06-23 19:41 G	18265259.31	18265259.32	18265259.36	0.0075	0.0074
Venus	45443-07-11 04:19 G	18318965.56	18318965.68	18318965.84	0.0063	0.0048
Venus	45444-02-21 08:24 G	18319190.63	18319190.85	18319191.07	0.0063	0.0009
Venus	45444-10-03 11:31 G	18319415.81	18319415.98	18319416.19	0.0063	0.0031
Earth	45451-09-04 21:50 G	18321943.22	18321943.41	18321943.65	0.0066	0.0037
Moon	45451-09-05 00:58 G	18321943.35	18321943.54	18321943.78	0.0066	0.0038 *
Moon	45452-09-05 10:19 G	18322309.81	18322309.93	18322310.06	0.0066	0.0057
Earth	45452-09-05 11:31 G	18322309.88	18322309.98	18322310.15	0.0066	0.0057 *
Mercury	45456-10-11 16:05 G	18323807.11	18323807.17	18323807.24	0.0068	0.0059
Mercury	45457-01-07 16:34 G	18323895.11	18323895.19	18323895.29	0.0068	0.0049
Mercury	45457-04-05 17:17 G	18323983.11	18323983.22	18323983.33	0.0068	0.0039

Mercury	45457-07-02 17:46 G	18324071.12	18324071.24	18324071.36	0.0068	0.0028
Mercury	45457-09-28 18:14 G	18324159.14	18324159.26	18324159.39	0.0068	0.0018
Mercury	45457-12-25 18:43 G	18324247.15	18324247.28	18324247.42	0.0069	0.0008
Mercury	45458-03-23 19:26 G	18324335.18	18324335.31	18324335.44	0.0069	0.0003
Mercury	45458-06-19 19:55 G	18324423.20	18324423.33	18324423.46	0.0069	0.0014
Mercury	45458-09-15 20:24 G	18324511.23	18324511.35	18324511.48	0.0069	0.0025
Mercury	45458-12-12 21:07 G	18324599.26	18324599.38	18324599.49	0.0069	0.0035
Mercury	45459-03-10 21:22 G	18324687.30	18324687.39	18324687.50	0.0069	0.0047
Mercury	45459-06-06 21:50 G	18324775.35	18324775.41	18324775.50	0.0069	0.0058
Mercury	45459-09-02 22:19 G	18324863.43	18324863.43	18324863.47	0.0069	0.0069
Venus	45533-08-26 19:26 G	18351884.21	18351884.31	18351884.45	0.0081	0.0068
Venus	45534-04-09 06:29 G	18352109.56	18352109.77	18352109.99	0.0080	0.0016
Mars	45534-07-29 14:38 G	18352220.97	18352221.11	18352221.33	0.0080	0.0068
Moon	45539-03-10 00:43 G	18353905.31	18353905.53	18353905.77	0.0078	0.0030
Earth	45539-03-10 00:58 G	18353905.31	18353905.54	18353905.79	0.0078	0.0028 *
Mercury	45543-05-09 08:24 G	18355426.74	18355426.85	18355426.97	0.0076	0.0060
Mercury	45543-08-05 10:48 G	18355514.79	18355514.95	18355515.12	0.0075	0.0040
Mercury	45543-11-01 13:12 G	18355602.87	18355603.05	18355603.25	0.0075	0.0020
Mercury	45544-01-28 15:50 G	18355690.97	18355691.16	18355691.36	0.0075	0.0002
Mercury	45544-04-25 18:14 G	18355779.08	18355779.26	18355779.45	0.0075	0.0021
Mercury	45544-07-22 20:38 G	18355867.21	18355867.36	18355867.53	0.0075	0.0041
Mercury	45544-10-18 23:02 G	18355955.36	18355955.46	18355955.58	0.0075	0.0061
Venus	45692-01-25 08:24 G	18409744.69	18409744.85	18409745.05	0.0063	0.0038
Venus	45692-09-06 12:29 G	18409969.80	18409970.02	18409970.24	0.0063	0.0001
Venus	45693-04-19 15:22 G	18410195.00	18410195.14	18410195.34	0.0063	0.0042
Mars	45693-08-12 02:53 G	18410309.54	18410309.62	18410309.77	0.0063	0.0059
Moon	45700-09-08 10:34 G	18412892.69	18412892.94	18412893.22	0.0066	0.0009
Earth	45700-09-08 11:02 G	18412892.71	18412892.96	18412893.22	0.0066	0.0012 *
Mercury	45705-02-04 23:02 G	18414503.42	18414503.46	18414503.52	0.0068	0.0063
Mercury	45705-05-03 23:46 G	18414591.41	18414591.49	18414591.58	0.0068	0.0052

Mercury	45705-07-31 00:14 G	18414679.41	18414679.51	18414679.62	0.0068	0.0042
Mercury	45705-10-27 00:58 G	18414767.42	18414767.54	18414767.66	0.0068	0.0032
Mercury	45706-01-23 01:26 G	18414855.44	18414855.56	18414855.69	0.0068	0.0021
Mercury	45706-04-21 01:55 G	18414943.45	18414943.58	18414943.72	0.0068	0.0011
Mercury	45706-07-18 02:38 G	18415031.47	18415031.61	18415031.74	0.0069	0.0001
Mercury	45706-10-14 03:07 G	18415119.50	18415119.63	18415119.76	0.0069	0.0011
Mercury	45707-01-10 03:36 G	18415207.53	18415207.65	18415207.78	0.0069	0.0021
Mercury	45707-04-08 04:05 G	18415295.56	18415295.67	18415295.79	0.0069	0.0032
Mercury	45707-07-05 04:34 G	18415383.60	18415383.69	18415383.80	0.0069	0.0043
Mercury	45707-10-01 05:02 G	18415471.64	18415471.71	18415471.80	0.0069	0.0054
Mercury	45707-12-28 05:46 G	18415559.70	18415559.74	18415559.79	0.0069	0.0065
Venus	45782-03-13 00:43 G	18442663.37	18442663.53	18442663.72	0.0081	0.0050
Venus	45782-10-24 11:17 G	18442888.78	18442888.97	18442889.19	0.0080	0.0034
Mars	45782-11-06 02:10 G	18442901.26	18442901.59	18442901.92	0.0080	0.0001
Earth	45788-03-12 20:10 G	18444855.18	18444855.34	18444855.56	0.0077	0.0054
Moon	45788-03-12 23:31 G	18444855.30	18444855.48	18444855.69	0.0077	0.0050 *
Mercury	45791-09-01 12:14 G	18446122.95	18446123.01	18446123.11	0.0076	0.0068
Mercury	45791-11-28 14:38 G	18446210.98	18446211.11	18446211.28	0.0075	0.0048
Mercury	45792-02-24 17:31 G	18446299.06	18446299.23	18446299.42	0.0075	0.0027
Mercury	45792-05-22 20:10 G	18446387.15	18446387.34	18446387.53	0.0075	0.0006
Mercury	45792-08-18 22:19 G	18446475.25	18446475.43	18446475.63	0.0075	0.0015
Mercury	45792-11-15 00:43 G	18446563.37	18446563.53	18446563.72	0.0075	0.0034
Mercury	45793-02-11 03:07 G	18446651.51	18446651.63	18446651.78	0.0075	0.0054
Mercury	45793-05-10 05:31 G	18446739.72	18446739.73	18446739.78	0.0075	0.0074
Venus	45940-08-12 11:31 G	18500523.80	18500523.98	18500524.19	0.0063	0.0031
Venus	45941-03-25 15:22 G	18500748.92	18500749.14	18500749.36	0.0063	0.0008
Venus	45941-11-05 18:43 G	18500974.15	18500974.28	18500974.44	0.0063	0.0048
Mars	45941-11-22 02:24 G	18500990.32	18500990.60	18500990.91	0.0063	0.0015
Earth	45948-09-11 07:26 G	18503475.62	18503475.81	18503476.05	0.0066	0.0037
Moon	45948-09-11 09:07 G	18503475.69	18503475.88	18503476.11	0.0066	0.0037 *

Moon	45949-09-12 18:14 G	18503842.13	18503842.26	18503842.41	0.0066	0.0056
Earth	45949-09-12 21:22 G	18503842.28	18503842.39	18503842.55	0.0066	0.0057 *
Mercury	45953-08-28 06:29 G	18505287.71	18505287.77	18505287.85	0.0068	0.0058
Mercury	45953-11-24 06:58 G	18505375.71	18505375.79	18505375.89	0.0068	0.0048
Mercury	45954-02-20 07:41 G	18505463.71	18505463.82	18505463.93	0.0068	0.0038
Mercury	45954-05-19 08:10 G	18505551.72	18505551.84	18505551.97	0.0068	0.0027
Mercury	45954-08-15 08:53 G	18505639.74	18505639.87	18505640.00	0.0068	0.0017
Mercury	45954-11-11 09:22 G	18505727.76	18505727.89	18505728.03	0.0068	0.0006
Mercury	45955-02-07 09:50 G	18505815.78	18505815.91	18505816.05	0.0069	0.0005
Mercury	45955-05-06 10:19 G	18505903.81	18505903.93	18505904.07	0.0069	0.0016
Mercury	45955-08-02 11:02 G	18505991.84	18505991.96	18505992.08	0.0069	0.0026
Mercury	45955-10-29 11:17 G	18506079.87	18506079.97	18506080.10	0.0069	0.0037
Mercury	45956-01-25 11:46 G	18506167.91	18506167.99	18506168.10	0.0069	0.0048
Mercury	45956-04-22 12:29 G	18506255.96	18506256.02	18506256.10	0.0069	0.0059

# 47TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 47th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	46030-09-28 04:19 G		18533442.49	18533442.68	18533442.88	0.0081	0.0040	
Venus	46031-05-11 14:53 G		18533667.94	18533668.12	18533668.31	0.0080	0.0043	
Moon	46036-03-15 08:38 G		18535437.63	18535437.86	18535438.11	0.0078	0.0027	
Earth	46036-03-15 12:00 G		18535437.77	18535438.00	18535438.26	0.0078	0.0026 *	

Mercury	46040-03-23 18:29 G	18536907.16	18536907.27	18536907.40	0.0076	0.0059
Mercury	46040-06-19 20:53 G	18536995.22	18536995.37	18536995.55	0.0075	0.0039
Mercury	46040-09-15 23:31 G	18537083.30	18537083.48	18537083.67	0.0075	0.0018
Mercury	46040-12-13 02:10 G	18537171.40	18537171.59	18537171.78	0.0075	0.0002
Mercury	46041-03-11 04:34 G	18537259.51	18537259.69	18537259.88	0.0075	0.0022
Mercury	46041-06-07 06:58 G	18537347.63	18537347.79	18537347.95	0.0075	0.0042
Mercury	46041-09-03 08:53 G	18537435.79	18537435.87	18537436.00	0.0075	0.0063
Venus	46188-07-16 12:43 G	18591077.96	18591078.03	18591078.14	0.0063	0.0057
Venus	46189-02-26 16:48 G	18591302.99	18591303.20	18591303.41	0.0063	0.0018
Venus	46189-10-09 20:24 G	18591528.14	18591528.35	18591528.56	0.0063	0.0021
Mars	46190-03-02 06:00 G	18591671.48	18591671.75	18591672.07	0.0063	0.0020
Venus	46190-05-22 23:17 G	18591753.44	18591753.47	18591753.57	0.0063	0.0061
Earth	46197-09-14 22:05 G	18594425.18	18594425.42	18594425.68	0.0066	0.0017
Moon	46197-09-15 01:26 G	18594425.32	18594425.56	18594425.83	0.0066	0.0014 *
Mercury	46201-12-22 13:41 G	18595984.02	18595984.07	18595984.15	0.0068	0.0060
Mercury	46202-03-20 14:24 G	18596072.02	18596072.10	18596072.20	0.0068	0.0049
Mercury	46202-06-16 14:53 G	18596160.02	18596160.12	18596160.24	0.0068	0.0039
Mercury	46202-09-12 15:36 G	18596248.03	18596248.15	18596248.28	0.0068	0.0028
Mercury	46202-12-09 16:05 G	18596336.05	18596336.17	18596336.31	0.0068	0.0018
Mercury	46203-03-07 16:48 G	18596424.07	18596424.20	18596424.33	0.0068	0.0007
Mercury	46203-06-03 17:17 G	18596512.09	18596512.22	18596512.36	0.0069	0.0004
Mercury	46203-08-30 17:46 G	18596600.12	18596600.24	18596600.38	0.0069	0.0014
Mercury	46203-11-26 18:14 G	18596688.14	18596688.26	18596688.39	0.0069	0.0025
Mercury	46204-02-22 18:43 G	18596776.18	18596776.28	18596776.41	0.0069	0.0036
Mercury	46204-05-20 19:26 G	18596864.22	18596864.31	18596864.41	0.0069	0.0046
Mercury	46204-08-16 19:55 G	18596952.27	18596952.33	18596952.41	0.0069	0.0057
Mercury	46204-11-12 20:24 G	18597040.34	18597040.35	18597040.38	0.0069	0.0068
Venus	46279-04-15 10:19 G	18624221.72	18624221.93	18624222.15	0.0081	0.0018
Venus	46279-11-26 21:07 G	18624447.25	18624447.38	18624447.52	0.0080	0.0064
Moon	46285-03-20 07:12 G	18626387.65	18626387.80	18626387.99	0.0077	0.0058

Earth	46285-03-20 08:53 G	18626387.74	18626387.87	18626388.05	0.0077	0.0062	*
Mercury	46288-07-17 23:02 G	18627603.37	18627603.46	18627603.57	0.0076	0.0064	
Mercury	46288-10-14 01:26 G	18627691.42	18627691.56	18627691.73	0.0075	0.0044	
Mercury	46289-01-10 04:19 G	18627779.49	18627779.68	18627779.86	0.0075	0.0023	
Mercury	46289-04-08 06:43 G	18627867.59	18627867.78	18627867.97	0.0075	0.0003	
Mercury	46289-07-05 08:53 G	18627955.70	18627955.87	18627956.07	0.0075	0.0018	
Mercury	46289-10-01 11:17 G	18628043.82	18628043.97	18628044.15	0.0075	0.0038	
Mercury	46289-12-28 13:41 G	18628131.96	18628132.07	18628132.21	0.0075	0.0058	
Venus	46437-01-31 17:02 G	18681857.09	18681857.21	18681857.39	0.0063	0.0046	
Venus	46437-09-13 21:07 G	18682082.17	18682082.38	18682082.61	0.0063	0.0007	
Venus	46438-04-27 00:29 G	18682307.35	18682307.52	18682307.73	0.0063	0.0033	
Mars	46438-06-11 08:24 G	18682352.74	18682352.85	18682353.04	0.0063	0.0056	
Moon	46445-09-17 18:43 G	18685008.04	18685008.28	18685008.52	0.0066	0.0023	
Earth	46445-09-17 21:36 G	18685008.18	18685008.40	18685008.66	0.0066	0.0024	*
Mercury	46450-04-16 20:53 G	18686680.33	18686680.37	18686680.44	0.0068	0.0062	
Mercury	46450-07-13 21:50 G	18686768.32	18686768.41	18686768.50	0.0068	0.0051	
Mercury	46450-10-09 22:05 G	18686856.33	18686856.42	18686856.54	0.0068	0.0041	
Mercury	46451-01-05 22:48 G	18686944.34	18686944.45	18686944.57	0.0068	0.0031	
Mercury	46451-04-03 23:17 G	18687032.35	18687032.47	18687032.61	0.0068	0.0020	
Mercury	46451-07-01 00:00 G	18687120.37	18687120.50	18687120.63	0.0068	0.0009	
Mercury	46451-09-27 00:29 G	18687208.39	18687208.52	18687208.66	0.0068	0.0003	
Mercury	46451-12-24 01:12 G	18687296.42	18687296.55	18687296.68	0.0069	0.0012	
Mercury	46452-03-21 01:26 G	18687384.44	18687384.56	18687384.70	0.0069	0.0023	
Mercury	46452-06-17 01:55 G	18687472.48	18687472.58	18687472.71	0.0069	0.0034	
Mercury	46452-09-13 02:38 G	18687560.52	18687560.61	18687560.72	0.0069	0.0044	
Mercury	46452-12-10 03:07 G	18687648.56	18687648.63	18687648.72	0.0069	0.0055	
Mercury	46453-03-08 03:36 G	18687736.63	18687736.65	18687736.70	0.0069	0.0066	
Venus	46527-03-20 05:17 G	18714775.72	18714775.72	18714775.75	0.0081	0.0081	
Venus	46527-10-31 16:19 G	18715000.96	18715001.18	18715001.40	0.0081	0.0002	
Earth	46533-03-23 04:48 G	18716970.44	18716970.70	18716970.96	0.0078	0.0004	

Moon	46533-03-23 05:17 G	18716970.46	18716970.72	18716970.99	0.0078	0.0006 *
Mercury	46536-11-11 03:36 G	18718299.59	18718299.65	18718299.75	0.0076	0.0069
Mercury	46537-02-07 06:29 G	18718387.62	18718387.77	18718387.92	0.0076	0.0048
Mercury	46537-05-06 08:38 G	18718475.69	18718475.86	18718476.05	0.0075	0.0028
Mercury	46537-08-02 11:17 G	18718563.78	18718563.97	18718564.17	0.0075	0.0007
Mercury	46537-10-29 13:41 G	18718651.89	18718652.07	18718652.27	0.0075	0.0014
Mercury	46538-01-25 16:19 G	18718740.01	18718740.18	18718740.35	0.0075	0.0033
Mercury	46538-04-23 18:14 G	18718828.15	18718828.26	18718828.42	0.0075	0.0054
Mercury	46538-07-20 20:38 G	18718916.35	18718916.36	18718916.42	0.0075	0.0074
Venus	46685-08-19 00:00 G	18772636.32	18772636.50	18772636.72	0.0063	0.0027
Venus	46686-04-01 03:50 G	18772861.45	18772861.66	18772861.88	0.0063	0.0012
Venus	46686-11-12 07:12 G	18773086.69	18773086.80	18773086.94	0.0063	0.0052
Earth	46693-09-21 01:41 G	18775591.43	18775591.57	18775591.74	0.0066	0.0052
Moon	46693-09-21 03:07 G	18775591.48	18775591.63	18775591.84	0.0066	0.0049 *
Moon	46694-09-22 15:07 G	18775957.95	18775958.13	18775958.36	0.0066	0.0039
Earth	46694-09-22 15:07 G	18775957.96	18775958.13	18775958.36	0.0066	0.0042 *
Mercury	46698-08-11 05:02 G	18777376.65	18777376.71	18777376.79	0.0068	0.0058
Mercury	46698-11-07 05:31 G	18777464.65	18777464.73	18777464.84	0.0068	0.0048
Mercury	46699-02-03 06:14 G	18777552.65	18777552.76	18777552.88	0.0068	0.0037
Mercury	46699-05-02 06:43 G	18777640.67	18777640.78	18777640.91	0.0068	0.0027
Mercury	46699-07-29 07:26 G	18777728.68	18777728.81	18777728.94	0.0068	0.0016
Mercury	46699-10-25 07:55 G	18777816.70	18777816.83	18777816.97	0.0068	0.0006
Mercury	46700-01-21 08:38 G	18777904.72	18777904.86	18777904.99	0.0068	0.0005
Mercury	46700-04-19 09:07 G	18777992.75	18777992.88	18777993.01	0.0069	0.0016
Mercury	46700-07-16 09:36 G	18778080.78	18778080.90	18778081.03	0.0069	0.0026
Mercury	46700-10-12 10:19 G	18778168.82	18778168.93	18778169.04	0.0069	0.0037
Mercury	46701-01-08 10:34 G	18778256.86	18778256.94	18778257.05	0.0069	0.0048
Mercury	46701-04-06 11:02 G	18778344.91	18778344.96	18778345.04	0.0069	0.0059
Venus	46775-10-05 14:53 G	18805554.94	18805555.12	18805555.31	0.0081	0.0044
Venus	46776-05-18 01:41 G	18805780.37	18805780.57	18805780.76	0.0080	0.0038



Earth	46781-03-26 04:48 G	18807553.51	18807553.70	18807553.89	0.0078	0.0053
Moon	46781-03-26 05:46 G	18807553.58	18807553.74	18807553.96	0.0078	0.0050 *
Mercury	46785-03-07 09:50 G	18808995.82	18808995.91	18808996.02	0.0076	0.0064
Mercury	46785-06-03 12:14 G	18809083.87	18809084.01	18809084.18	0.0076	0.0044
Mercury	46785-08-30 14:38 G	18809171.94	18809172.11	18809172.31	0.0075	0.0024
Mercury	46785-11-26 17:31 G	18809260.04	18809260.23	18809260.42	0.0075	0.0003
Mercury	46786-02-22 19:55 G	18809348.14	18809348.33	18809348.52	0.0075	0.0018
Mercury	46786-05-21 22:05 G	18809436.27	18809436.42	18809436.60	0.0075	0.0038
Mercury	46786-08-18 00:29 G	18809524.41	18809524.52	18809524.65	0.0075	0.0058
Venus	46933-07-24 03:50 G	18863190.51	18863190.66	18863190.82	0.0063	0.0045
Venus	46934-03-06 07:12 G	18863415.59	18863415.80	18863416.03	0.0063	0.0007
Venus	46934-10-17 10:34 G	18863640.77	18863640.94	18863641.15	0.0063	0.0033
Moon	46942-09-25 18:14 G	18866541.00	18866541.26	18866541.53	0.0066	0.0014
Earth	46942-09-25 19:41 G	18866541.08	18866541.32	18866541.58	0.0066	0.0014 *
Mercury	46946-09-08 12:14 G	18867984.99	18867985.01	18867985.07	0.0068	0.0065
Mercury	46946-12-05 13:12 G	18868072.98	18868073.05	18868073.13	0.0068	0.0054
Mercury	46947-03-03 13:26 G	18868160.98	18868161.06	18868161.18	0.0068	0.0044
Mercury	46947-05-30 14:10 G	18868248.98	18868249.09	18868249.22	0.0068	0.0034
Mercury	46947-08-26 14:38 G	18868337.00	18868337.11	18868337.25	0.0068	0.0023
Mercury	46947-11-22 15:22 G	18868425.01	18868425.14	18868425.28	0.0068	0.0012
Mercury	46948-02-18 16:05 G	18868513.03	18868513.17	18868513.30	0.0068	0.0002
Mercury	46948-05-16 16:34 G	18868601.06	18868601.19	18868601.32	0.0069	0.0009
Mercury	46948-08-12 17:02 G	18868689.09	18868689.21	18868689.34	0.0069	0.0020
Mercury	46948-11-08 17:31 G	18868777.12	18868777.23	18868777.36	0.0069	0.0031
Mercury	46949-02-04 18:00 G	18868865.16	18868865.25	18868865.37	0.0069	0.0042
Mercury	46949-05-03 18:43 G	18868953.20	18868953.28	18868953.37	0.0069	0.0052
Mercury	46949-07-30 19:12 G	18869041.26	18869041.30	18869041.36	0.0069	0.0063

# 48TH MILLENNIUM CE

**This is a list of transits visible from Pluto in the 48th millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	47024-04-22 01:12	G	18896334.33	18896334.55	18896334.77	0.0081	0.0004	
Venus	47024-12-03 11:17	G	18896559.95	18896559.97	18896560.05	0.0080	0.0079	
Earth	47030-03-31 07:55	G	18898503.68	18898503.83	18898504.03	0.0077	0.0058	
Moon	47030-03-31 11:46	G	18898503.83	18898503.99	18898504.18	0.0077	0.0057	*
Mercury	47033-07-01 16:34	G	18899692.08	18899692.19	18899692.33	0.0076	0.0056	
Mercury	47033-09-27 18:58	G	18899780.14	18899780.29	18899780.48	0.0076	0.0036	
Mercury	47033-12-24 21:36	G	18899868.22	18899868.40	18899868.60	0.0075	0.0015	
Mercury	47034-03-23 00:14	G	18899956.32	18899956.51	18899956.70	0.0075	0.0006	
Mercury	47034-06-19 02:24	G	18900044.43	18900044.60	18900044.79	0.0075	0.0026	
Mercury	47034-09-15 04:48	G	18900132.56	18900132.70	18900132.86	0.0075	0.0046	
Mercury	47034-12-12 07:12	G	18900220.72	18900220.80	18900220.90	0.0075	0.0066	
Venus	47181-06-28 08:38	G	18953744.80	18953744.86	18953744.99	0.0063	0.0057	
Venus	47182-02-08 12:43	G	18953969.83	18953970.03	18953970.25	0.0063	0.0018	
Venus	47182-09-21 16:34	G	18954194.98	18954195.19	18954195.40	0.0063	0.0021	
Venus	47183-05-04 20:10	G	18954420.27	18954420.34	18954420.41	0.0063	0.0060	
Earth	47190-09-29 04:05	G	18957124.41	18957124.67	18957124.93	0.0066	0.0003	
Moon	47190-09-29 06:58	G	18957124.53	18957124.79	18957125.04	0.0066	0.0001	*
Mercury	47194-10-06 20:53	G	18958593.34	18958593.37	18958593.41	0.0068	0.0065	
Mercury	47195-01-02 21:22	G	18958681.32	18958681.39	18958681.47	0.0068	0.0055	
Mercury	47195-03-31 21:36	G	18958769.32	18958769.40	18958769.52	0.0068	0.0045	
Mercury	47195-06-27 22:19	G	18958857.33	18958857.43	18958857.56	0.0068	0.0035	
Mercury	47195-09-23 23:02	G	18958945.34	18958945.46	18958945.59	0.0068	0.0024	

Mercury	47195-12-20 23:31 G	18959033.35	18959033.48	18959033.62	0.0068	0.0013
Mercury	47196-03-18 00:14 G	18959121.37	18959121.51	18959121.64	0.0068	0.0002
Mercury	47196-06-14 00:43 G	18959209.40	18959209.53	18959209.67	0.0068	0.0008
Mercury	47196-09-10 01:26 G	18959297.43	18959297.56	18959297.68	0.0069	0.0019
Mercury	47196-12-07 01:41 G	18959385.46	18959385.57	18959385.70	0.0069	0.0030
Mercury	47197-03-05 02:10 G	18959473.50	18959473.59	18959473.71	0.0069	0.0041
Mercury	47197-06-01 02:38 G	18959561.54	18959561.61	18959561.71	0.0069	0.0052
Mercury	47197-08-28 03:36 G	18959649.60	18959649.65	18959649.70	0.0069	0.0062
Venus	47272-03-26 04:05 G	18986888.47	18986888.67	18986888.88	0.0081	0.0031
Venus	47272-11-06 14:24 G	18987113.95	18987114.10	18987114.29	0.0080	0.0051
Moon	47278-04-02 11:31 G	18989086.76	18989086.98	18989087.22	0.0078	0.0035
Earth	47278-04-02 14:53 G	18989086.89	18989087.12	18989087.37	0.0078	0.0031 *
Mercury	47281-07-28 22:05 G	18990300.32	18990300.42	18990300.56	0.0076	0.0060
Mercury	47281-10-25 00:43 G	18990388.38	18990388.53	18990388.70	0.0076	0.0039
Mercury	47282-01-21 03:07 G	18990476.46	18990476.63	18990476.83	0.0075	0.0019
Mercury	47282-04-19 05:46 G	18990564.55	18990564.74	18990564.93	0.0075	0.0002
Mercury	47282-07-16 08:10 G	18990652.66	18990652.84	18990653.03	0.0075	0.0022
Mercury	47282-10-12 10:34 G	18990740.79	18990740.94	18990741.10	0.0075	0.0043
Mercury	47283-01-08 12:29 G	18990828.94	18990829.02	18990829.15	0.0075	0.0063
Venus	47430-01-13 18:43 G	19044524.09	19044524.28	19044524.49	0.0063	0.0028
Venus	47430-08-26 22:19 G	19044749.22	19044749.43	19044749.66	0.0063	0.0011
Venus	47431-04-09 01:41 G	19044974.45	19044974.57	19044974.72	0.0063	0.0050
Moon	47438-10-02 09:22 G	19047707.65	19047707.89	19047708.16	0.0066	0.0017
Earth	47438-10-02 13:12 G	19047707.80	19047708.05	19047708.30	0.0066	0.0017 *
Mercury	47442-11-04 04:48 G	19049201.68	19049201.70	19049201.75	0.0068	0.0066
Mercury	47443-01-31 05:31 G	19049289.66	19049289.73	19049289.82	0.0068	0.0055
Mercury	47443-04-29 06:00 G	19049377.66	19049377.75	19049377.86	0.0068	0.0045
Mercury	47443-07-26 06:43 G	19049465.67	19049465.78	19049465.90	0.0068	0.0034
Mercury	47443-10-22 07:26 G	19049553.68	19049553.81	19049553.93	0.0068	0.0024
Mercury	47444-01-18 07:55 G	19049641.70	19049641.83	19049641.96	0.0068	0.0013

Mercury	47444-04-15 08:24 G	19049729.72	19049729.85	19049729.99	0.0068	0.0003
Mercury	47444-07-12 08:53 G	19049817.74	19049817.87	19049818.01	0.0068	0.0009
Mercury	47444-10-08 09:36 G	19049905.77	19049905.90	19049906.03	0.0069	0.0019
Mercury	47445-01-04 10:05 G	19049993.80	19049993.92	19049994.04	0.0069	0.0030
Mercury	47445-04-02 10:34 G	19050081.84	19050081.94	19050082.05	0.0069	0.0041
Mercury	47445-06-29 11:02 G	19050169.88	19050169.96	19050170.06	0.0069	0.0052
Mercury	47445-09-25 11:31 G	19050257.94	19050257.98	19050258.05	0.0069	0.0063
Venus	47520-03-01 07:55 G	19077442.68	19077442.83	19077443.02	0.0081	0.0052
Venus	47520-10-12 18:29 G	19077668.09	19077668.27	19077668.50	0.0081	0.0031
Earth	47526-04-06 23:31 G	19079670.23	19079670.48	19079670.74	0.0078	0.0013
Moon	47526-04-07 02:38 G	19079670.36	19079670.61	19079670.88	0.0078	0.0015 *
Mercury	47529-08-27 04:48 G	19080908.58	19080908.70	19080908.83	0.0076	0.0058
Mercury	47529-11-23 06:58 G	19080996.64	19080996.79	19080996.97	0.0076	0.0038
Mercury	47530-02-19 09:50 G	19081084.72	19081084.91	19081085.10	0.0076	0.0017
Mercury	47530-05-18 12:14 G	19081172.82	19081173.01	19081173.20	0.0075	0.0004
Mercury	47530-08-14 14:24 G	19081260.93	19081261.10	19081261.29	0.0075	0.0024
Mercury	47530-11-10 16:48 G	19081349.05	19081349.20	19081349.36	0.0075	0.0044
Mercury	47531-02-06 19:12 G	19081437.21	19081437.30	19081437.41	0.0075	0.0064
Venus	47677-12-18 02:38 G	19135078.43	19135078.61	19135078.81	0.0063	0.0031
Venus	47678-07-31 06:29 G	19135303.55	19135303.77	19135303.99	0.0063	0.0007
Venus	47679-03-13 09:36 G	19135528.77	19135528.90	19135529.07	0.0063	0.0047
Earth	47686-10-05 00:58 G	19138291.31	19138291.54	19138291.80	0.0066	0.0020
Moon	47686-10-05 04:34 G	19138291.46	19138291.69	19138291.95	0.0066	0.0023 *
Mercury	47690-12-01 13:41 G	19139810.03	19139810.07	19139810.14	0.0068	0.0061
Mercury	47691-02-27 14:24 G	19139898.02	19139898.10	19139898.20	0.0068	0.0050
Mercury	47691-05-26 14:53 G	19139986.02	19139986.12	19139986.24	0.0068	0.0040
Mercury	47691-08-22 15:36 G	19140074.03	19140074.15	19140074.28	0.0068	0.0029
Mercury	47691-11-18 16:19 G	19140162.05	19140162.18	19140162.31	0.0068	0.0019
Mercury	47692-02-14 16:48 G	19140250.07	19140250.20	19140250.33	0.0068	0.0008
Mercury	47692-05-12 17:17 G	19140338.09	19140338.22	19140338.36	0.0068	0.0003

Mercury	47692-08-08 17:46 G	19140426.12	19140426.24	19140426.38	0.0069	0.0014
Mercury	47692-11-04 18:14 G	19140514.15	19140514.26	19140514.40	0.0069	0.0025
Mercury	47693-01-31 18:58 G	19140602.18	19140602.29	19140602.41	0.0069	0.0035
Mercury	47693-04-29 19:26 G	19140690.22	19140690.31	19140690.42	0.0069	0.0046
Mercury	47693-07-26 19:55 G	19140778.27	19140778.33	19140778.42	0.0069	0.0057
Mercury	47693-10-22 20:24 G	19140866.34	19140866.35	19140866.39	0.0069	0.0068
Venus	47768-02-03 14:38 G	19167996.99	19167997.11	19167997.27	0.0081	0.0062
Venus	47768-09-16 01:41 G	19168222.37	19168222.57	19168222.79	0.0081	0.0021
Moon	47774-04-09 10:34 G	19170253.69	19170253.94	19170254.19	0.0078	0.0004
Earth	47774-04-09 12:00 G	19170253.75	19170254.00	19170254.26	0.0078	0.0008 *
Mercury	47777-06-27 09:22 G	19171428.85	19171428.89	19171428.99	0.0076	0.0071
Mercury	47777-09-23 12:14 G	19171516.88	19171517.01	19171517.16	0.0076	0.0050
Mercury	47777-12-20 14:38 G	19171604.94	19171605.11	19171605.30	0.0076	0.0029
Mercury	47778-03-18 17:17 G	19171693.03	19171693.22	19171693.41	0.0075	0.0009
Mercury	47778-06-14 19:41 G	19171781.13	19171781.32	19171781.51	0.0075	0.0012
Mercury	47778-09-10 21:50 G	19171869.25	19171869.41	19171869.60	0.0075	0.0032
Mercury	47778-12-08 00:14 G	19171957.38	19171957.51	19171957.66	0.0075	0.0052
Mercury	47779-03-06 02:38 G	19172045.57	19172045.61	19172045.67	0.0075	0.0072
Venus	47925-11-23 11:02 G	19225632.78	19225632.96	19225633.16	0.0063	0.0032
Venus	47926-07-06 14:53 G	19225857.91	19225858.12	19225858.35	0.0063	0.0006
Venus	47927-02-16 18:00 G	19226083.12	19226083.25	19226083.43	0.0063	0.0045
Moon	47934-10-09 11:31 G	19228874.75	19228874.98	19228875.24	0.0066	0.0020
Earth	47934-10-09 14:53 G	19228874.88	19228875.12	19228875.38	0.0066	0.0020 *
Mercury	47938-10-03 22:05 G	19230330.40	19230330.42	19230330.48	0.0068	0.0065
Mercury	47938-12-30 22:48 G	19230418.38	19230418.45	19230418.54	0.0068	0.0054
Mercury	47939-03-28 23:17 G	19230506.38	19230506.47	19230506.59	0.0068	0.0044
Mercury	47939-06-25 00:00 G	19230594.39	19230594.50	19230594.63	0.0068	0.0033
Mercury	47939-09-21 00:43 G	19230682.40	19230682.53	19230682.66	0.0068	0.0022
Mercury	47939-12-18 01:12 G	19230770.42	19230770.55	19230770.69	0.0068	0.0012
Mercury	47940-03-15 01:55 G	19230858.44	19230858.58	19230858.71	0.0068	0.0001

Mercury	47940-06-11 02:24 G	19230946.47	19230946.60	19230946.73	0.0068	0.0010
Mercury	47940-09-07 02:53 G	19231034.50	19231034.62	19231034.75	0.0069	0.0020
Mercury	47940-12-04 03:36 G	19231122.53	19231122.65	19231122.77	0.0069	0.0031
Mercury	47941-03-02 04:05 G	19231210.57	19231210.67	19231210.78	0.0069	0.0042
Mercury	47941-05-29 04:34 G	19231298.61	19231298.69	19231298.78	0.0069	0.0053
Mercury	47941-08-25 05:02 G	19231386.67	19231386.71	19231386.77	0.0069	0.0064

# 49TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 49th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	48016-01-08 23:31 G		19258551.36	19258551.48	19258551.64	0.0081	0.0063	
Venus	48016-08-21 10:48 G		19258776.74	19258776.95	19258777.16	0.0081	0.0020	
Earth	48022-04-13 03:07 G		19260837.39	19260837.63	19260837.89	0.0078	0.0015	
Moon	48022-04-13 04:05 G		19260837.41	19260837.67	19260837.94	0.0078	0.0013	*
Mercury	48025-07-25 18:00 G		19262037.14	19262037.25	19262037.40	0.0076	0.0056	
Mercury	48025-10-21 20:38 G		19262125.20	19262125.36	19262125.54	0.0076	0.0035	
Mercury	48026-01-17 23:02 G		19262213.28	19262213.46	19262213.66	0.0076	0.0015	
Mercury	48026-04-16 01:41 G		19262301.38	19262301.57	19262301.76	0.0075	0.0006	
Mercury	48026-07-13 03:50 G		19262389.49	19262389.66	19262389.85	0.0075	0.0027	
Mercury	48026-10-09 06:29 G		19262477.62	19262477.77	19262477.92	0.0075	0.0047	
Mercury	48027-01-05 08:24 G		19262565.79	19262565.85	19262565.96	0.0075	0.0067	
Venus	48173-10-27 21:50 G		19316187.22	19316187.41	19316187.62	0.0063	0.0026	

Venus	48174-06-10 01:41 G	19316412.35	19316412.57	19316412.79	0.0063	0.0012
Venus	48175-01-21 04:48 G	19316637.59	19316637.70	19316637.85	0.0063	0.0052
Earth	48182-10-12 07:55 G	19319458.59	19319458.83	19319459.10	0.0066	0.0009
Moon	48182-10-12 10:34 G	19319458.67	19319458.94	19319459.20	0.0066	0.0004 *
Mercury	48186-08-04 07:12 G	19320850.78	19320850.80	19320850.87	0.0068	0.0064
Mercury	48186-10-31 08:10 G	19320938.76	19320938.84	19320938.93	0.0068	0.0053
Mercury	48187-01-27 08:24 G	19321026.76	19321026.85	19321026.97	0.0068	0.0043
Mercury	48187-04-25 09:07 G	19321114.77	19321114.88	19321115.01	0.0068	0.0032
Mercury	48187-07-22 09:50 G	19321202.78	19321202.91	19321203.04	0.0068	0.0021
Mercury	48187-10-18 10:19 G	19321290.80	19321290.93	19321291.07	0.0068	0.0011
Mercury	48188-01-14 11:02 G	19321378.82	19321378.96	19321379.09	0.0068	0.0001
Mercury	48188-04-11 11:31 G	19321466.85	19321466.98	19321467.11	0.0068	0.0011
Mercury	48188-07-08 12:00 G	19321554.88	19321555.00	19321555.13	0.0069	0.0021
Mercury	48188-10-04 12:29 G	19321642.91	19321643.02	19321643.15	0.0069	0.0032
Mercury	48188-12-31 13:12 G	19321730.95	19321731.05	19321731.16	0.0069	0.0043
Mercury	48189-03-29 13:41 G	19321818.99	19321819.07	19321819.16	0.0069	0.0054
Mercury	48189-06-25 14:10 G	19321907.06	19321907.09	19321907.14	0.0069	0.0065
Venus	48263-12-14 10:48 G	19349105.79	19349105.95	19349106.13	0.0081	0.0052
Venus	48264-07-26 21:36 G	19349331.20	19349331.40	19349331.61	0.0081	0.0030
Earth	48270-04-16 22:05 G	19351421.19	19351421.42	19351421.66	0.0078	0.0032
Moon	48270-04-16 22:34 G	19351421.24	19351421.44	19351421.68	0.0078	0.0036 *
Mercury	48273-05-27 00:58 G	19352557.43	19352557.54	19352557.69	0.0076	0.0056
Mercury	48273-08-23 03:36 G	19352645.49	19352645.65	19352645.83	0.0076	0.0035
Mercury	48273-11-19 06:00 G	19352733.57	19352733.75	19352733.95	0.0076	0.0015
Mercury	48274-02-15 08:38 G	19352821.67	19352821.86	19352822.05	0.0075	0.0006
Mercury	48274-05-14 11:02 G	19352909.78	19352909.96	19352910.14	0.0075	0.0027
Mercury	48274-08-10 13:12 G	19352997.91	19352998.05	19352998.21	0.0075	0.0047
Mercury	48274-11-06 15:36 G	19353086.08	19353086.15	19353086.25	0.0075	0.0067
Venus	48421-02-19 05:46 G	19406516.64	19406516.74	19406516.87	0.0063	0.0054
Venus	48421-10-02 09:22 G	19406741.69	19406741.89	19406742.11	0.0063	0.0016

Venus	48422-05-15 12:58 G	19406966.84	19406967.04	19406967.26	0.0063	0.0022
Venus	48422-12-26 16:05 G	19407192.15	19407192.17	19407192.26	0.0063	0.0062
Moon	48430-10-16 01:55 G	19410042.34	19410042.58	19410042.83	0.0066	0.0011
Earth	48430-10-16 03:07 G	19410042.39	19410042.63	19410042.90	0.0066	0.0011 *
Mercury	48434-06-05 16:48 G	19411371.15	19411371.20	19411371.28	0.0068	0.0060
Mercury	48434-09-01 17:31 G	19411459.15	19411459.23	19411459.33	0.0068	0.0049
Mercury	48434-11-28 18:14 G	19411547.15	19411547.26	19411547.37	0.0068	0.0038
Mercury	48435-02-24 18:43 G	19411635.16	19411635.28	19411635.41	0.0068	0.0028
Mercury	48435-05-23 19:26 G	19411723.18	19411723.31	19411723.44	0.0068	0.0017
Mercury	48435-08-19 19:55 G	19411811.20	19411811.33	19411811.47	0.0068	0.0007
Mercury	48435-11-15 20:24 G	19411899.22	19411899.35	19411899.49	0.0068	0.0005
Mercury	48436-02-11 21:07 G	19411987.25	19411987.38	19411987.51	0.0068	0.0015
Mercury	48436-05-09 21:36 G	19412075.28	19412075.40	19412075.53	0.0069	0.0026
Mercury	48436-08-05 22:05 G	19412163.31	19412163.42	19412163.54	0.0069	0.0037
Mercury	48436-11-01 22:19 G	19412251.35	19412251.43	19412251.54	0.0069	0.0048
Mercury	48437-01-28 23:02 G	19412339.40	19412339.46	19412339.54	0.0069	0.0059
Venus	48511-11-19 01:12 G	19439660.35	19439660.55	19439660.76	0.0081	0.0028
Venus	48512-07-01 11:31 G	19439885.84	19439885.98	19439886.17	0.0081	0.0054
Moon	48518-04-20 19:41 G	19442005.22	19442005.32	19442005.45	0.0077	0.0070
Earth	48518-04-20 20:53 G	19442005.28	19442005.37	19442005.53	0.0077	0.0068 *
Mercury	48520-12-30 07:12 G	19442989.72	19442989.80	19442989.90	0.0076	0.0066
Mercury	48521-03-28 09:22 G	19443077.76	19443077.89	19443078.06	0.0076	0.0046
Mercury	48521-06-24 12:00 G	19443165.83	19443166.00	19443166.19	0.0076	0.0025
Mercury	48521-09-20 14:38 G	19443253.92	19443254.11	19443254.30	0.0076	0.0004
Mercury	48521-12-17 16:48 G	19443342.02	19443342.20	19443342.40	0.0075	0.0017
Mercury	48522-03-15 19:12 G	19443430.14	19443430.30	19443430.48	0.0075	0.0037
Mercury	48522-06-11 21:22 G	19443518.29	19443518.39	19443518.53	0.0075	0.0057
Venus	48669-01-24 19:41 G	19497071.16	19497071.32	19497071.52	0.0063	0.0036
Venus	48669-09-06 23:46 G	19497296.27	19497296.49	19497296.71	0.0063	0.0002
Venus	48670-04-20 03:22 G	19497521.47	19497521.64	19497521.81	0.0063	0.0041



Mars	48672-12-13 21:36 G	19498490.18	19498490.40	19498490.67	0.0064	0.0040
Moon	48677-10-18 10:19 G	19500259.79	19500259.93	19500260.10	0.0066	0.0052
Earth	48677-10-18 12:29 G	19500259.90	19500260.02	19500260.19	0.0066	0.0054 *
Moon	48678-10-20 03:07 G	19500626.41	19500626.63	19500626.85	0.0066	0.0038
Earth	48678-10-20 02:10 G	19500626.42	19500626.59	19500626.82	0.0066	0.0042 *
Mercury	48682-01-09 02:24 G	19501803.56	19501803.60	19501803.68	0.0068	0.0061
Mercury	48682-04-07 03:07 G	19501891.55	19501891.63	19501891.73	0.0068	0.0050
Mercury	48682-07-04 03:50 G	19501979.55	19501979.66	19501979.77	0.0068	0.0039
Mercury	48682-09-30 04:19 G	19502067.56	19502067.68	19502067.81	0.0068	0.0029
Mercury	48682-12-27 04:48 G	19502155.58	19502155.70	19502155.84	0.0068	0.0019
Mercury	48683-03-25 05:31 G	19502243.60	19502243.73	19502243.87	0.0068	0.0008
Mercury	48683-06-21 06:00 G	19502331.62	19502331.75	19502331.89	0.0068	0.0004
Mercury	48683-09-17 06:29 G	19502419.65	19502419.77	19502419.91	0.0068	0.0015
Mercury	48683-12-14 07:12 G	19502507.68	19502507.80	19502507.93	0.0069	0.0025
Mercury	48684-03-11 07:41 G	19502595.71	19502595.82	19502595.94	0.0069	0.0036
Mercury	48684-06-07 08:10 G	19502683.75	19502683.84	19502683.95	0.0069	0.0047
Mercury	48684-09-03 08:38 G	19502771.80	19502771.86	19502771.95	0.0069	0.0058
Mercury	48684-11-30 09:22 G	19502859.89	19502859.89	19502859.91	0.0069	0.0069
Venus	48759-03-13 06:43 G	19529989.72	19529989.78	19529989.88	0.0081	0.0076
Venus	48759-10-24 17:46 G	19530215.03	19530215.24	19530215.47	0.0081	0.0007
Mars	48762-03-10 13:12 G	19531082.74	19531083.05	19531083.38	0.0080	0.0008
Moon	48765-04-22 21:22 G	19532222.18	19532222.39	19532222.65	0.0078	0.0038
Earth	48765-04-22 22:34 G	19532222.23	19532222.44	19532222.67	0.0078	0.0039 *
Mercury	48768-08-04 14:10 G	19533422.03	19533422.09	19533422.17	0.0076	0.0070
Mercury	48768-10-31 16:19 G	19533510.06	19533510.18	19533510.35	0.0076	0.0050
Mercury	48769-01-27 19:12 G	19533598.13	19533598.30	19533598.48	0.0076	0.0029
Mercury	48769-04-25 21:36 G	19533686.22	19533686.40	19533686.60	0.0076	0.0008
Mercury	48769-07-23 00:00 G	19533774.32	19533774.50	19533774.69	0.0076	0.0013
Mercury	48769-10-19 02:38 G	19533862.43	19533862.61	19533862.78	0.0075	0.0033
Mercury	48770-01-15 04:34 G	19533950.57	19533950.69	19533950.84	0.0075	0.0054

Mercury	48770-04-13 06:58 G	19534038.77	19534038.79	19534038.84	0.0075	0.0074
Venus	48916-05-19 07:26 G	19587400.70	19587400.81	19587400.97	0.0063	0.0050
Venus	48916-12-30 11:31 G	19587625.77	19587625.98	19587626.20	0.0063	0.0012
Venus	48917-08-12 15:07 G	19587850.94	19587851.13	19587851.34	0.0063	0.0027
Mars	48921-03-26 21:07 G	19589173.08	19589173.38	19589173.70	0.0064	0.0009
Earth	48925-10-22 15:07 G	19590843.89	19590844.13	19590844.39	0.0066	0.0014
Moon	48925-10-22 16:05 G	19590843.92	19590844.17	19590844.45	0.0066	0.0012 *
Mercury	48929-05-18 12:14 G	19592148.00	19592148.01	19592148.03	0.0068	0.0067
Mercury	48929-08-14 12:43 G	19592235.97	19592236.03	19592236.11	0.0068	0.0057
Mercury	48929-11-10 13:26 G	19592323.96	19592324.06	19592324.16	0.0068	0.0046
Mercury	48930-02-06 13:41 G	19592411.97	19592412.07	19592412.20	0.0068	0.0036
Mercury	48930-05-05 14:24 G	19592499.98	19592500.10	19592500.23	0.0068	0.0025
Mercury	48930-08-01 15:07 G	19592588.00	19592588.13	19592588.26	0.0068	0.0014
Mercury	48930-10-28 15:36 G	19592676.02	19592676.15	19592676.29	0.0068	0.0004
Mercury	48931-01-24 16:19 G	19592764.04	19592764.18	19592764.31	0.0068	0.0007
Mercury	48931-04-22 16:48 G	19592852.07	19592852.20	19592852.33	0.0068	0.0018
Mercury	48931-07-19 17:17 G	19592940.10	19592940.22	19592940.35	0.0069	0.0029
Mercury	48931-10-15 17:46 G	19593028.14	19593028.24	19593028.36	0.0069	0.0040
Mercury	48932-01-11 18:14 G	19593116.18	19593116.26	19593116.36	0.0069	0.0051
Mercury	48932-04-08 18:43 G	19593204.24	19593204.28	19593204.36	0.0069	0.0062

# 50TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 50th millennium CE.

PLANET	MAX- TRANSIT	C	START	MAX	END	SUNRAD	DEPTH	S
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TIME

Venus	49007-02-16 04:05 G	19620544.46	19620544.67	19620544.89	0.0081	0.0020
Venus	49007-09-29 14:38 G	19620769.98	19620770.11	19620770.27	0.0081	0.0061
Earth	49013-04-27 08:24 G	19622806.64	19622806.85	19622807.10	0.0078	0.0034
Moon	49013-04-27 10:19 G	19622806.73	19622806.93	19622807.17	0.0078	0.0038 *
Mercury	49016-03-09 23:02 G	19623854.37	19623854.46	19623854.60	0.0076	0.0061
Mercury	49016-06-06 01:41 G	19623942.42	19623942.57	19623942.74	0.0076	0.0040
Mercury	49016-09-02 04:19 G	19624030.50	19624030.68	19624030.87	0.0076	0.0019
Mercury	49016-11-29 06:43 G	19624118.59	19624118.78	19624118.97	0.0076	0.0002
Mercury	49017-02-25 08:53 G	19624206.70	19624206.87	19624207.07	0.0076	0.0023
Mercury	49017-05-24 11:17 G	19624294.83	19624294.97	19624295.14	0.0075	0.0043
Mercury	49017-08-20 13:26 G	19624382.98	19624383.06	19624383.19	0.0075	0.0063
Venus	49163-09-11 22:48 G	19677730.35	19677730.45	19677730.56	0.0063	0.0054
Venus	49164-04-24 02:10 G	19677955.39	19677955.59	19677955.81	0.0063	0.0017
Venus	49164-12-05 05:46 G	19678180.54	19678180.74	19678180.96	0.0063	0.0022
Venus	49165-07-18 09:07 G	19678405.84	19678405.88	19678405.98	0.0063	0.0060
Earth	49172-10-25 08:38 G	19681061.74	19681061.86	19681062.03	0.0066	0.0055
Moon	49172-10-25 10:19 G	19681061.82	19681061.93	19681062.13	0.0066	0.0055 *
Moon	49173-10-26 22:05 G	19681428.24	19681428.42	19681428.63	0.0066	0.0041
Earth	49173-10-26 22:19 G	19681428.26	19681428.43	19681428.66	0.0066	0.0042 *
Mercury	49176-09-24 22:34 G	19682492.44	19682492.44	19682492.45	0.0068	0.0068
Mercury	49176-12-21 23:17 G	19682580.40	19682580.47	19682580.54	0.0068	0.0057
Mercury	49177-03-19 23:31 G	19682668.40	19682668.48	19682668.59	0.0068	0.0047
Mercury	49177-06-16 00:14 G	19682756.40	19682756.51	19682756.63	0.0068	0.0036
Mercury	49177-09-12 00:58 G	19682844.42	19682844.54	19682844.67	0.0068	0.0025
Mercury	49177-12-09 01:26 G	19682932.43	19682932.56	19682932.70	0.0068	0.0015
Mercury	49178-03-07 02:10 G	19683020.45	19683020.59	19683020.72	0.0068	0.0004
Mercury	49178-06-03 02:38 G	19683108.48	19683108.61	19683108.74	0.0068	0.0007
Mercury	49178-08-30 03:07 G	19683196.50	19683196.63	19683196.76	0.0068	0.0018

Mercury	49178-11-26 03:36 G	19683284.54	19683284.65	19683284.78	0.0069	0.0029
Mercury	49179-02-22 04:05 G	19683372.57	19683372.67	19683372.79	0.0069	0.0040
Mercury	49179-05-21 04:34 G	19683460.62	19683460.69	19683460.80	0.0069	0.0051
Mercury	49179-08-17 05:31 G	19683548.67	19683548.73	19683548.79	0.0069	0.0061
Venus	49254-06-09 16:48 G	19710874.01	19710874.20	19710874.41	0.0081	0.0035
Venus	49255-01-21 03:36 G	19711099.49	19711099.65	19711099.85	0.0081	0.0047
Earth	49260-04-28 20:24 G	19713024.14	19713024.35	19713024.60	0.0078	0.0035
Moon	49260-04-28 21:36 G	19713024.19	19713024.40	19713024.64	0.0078	0.0036 *
Mercury	49263-07-17 06:58 G	19714198.71	19714198.79	19714198.91	0.0076	0.0064
Mercury	49263-10-13 09:36 G	19714286.76	19714286.90	19714287.07	0.0076	0.0043
Mercury	49264-01-09 12:14 G	19714374.83	19714375.01	19714375.19	0.0076	0.0022
Mercury	49264-04-06 14:38 G	19714462.92	19714463.11	19714463.30	0.0076	0.0002
Mercury	49264-07-03 17:02 G	19714551.03	19714551.21	19714551.40	0.0076	0.0019
Mercury	49264-09-29 19:12 G	19714639.15	19714639.30	19714639.47	0.0075	0.0040
Mercury	49264-12-26 21:36 G	19714727.29	19714727.40	19714727.52	0.0075	0.0060
Venus	49411-01-04 15:07 G	19768060.03	19768060.13	19768060.28	0.0063	0.0052
Venus	49411-08-17 19:12 G	19768285.09	19768285.30	19768285.52	0.0063	0.0014
Venus	49412-03-29 22:34 G	19768510.25	19768510.44	19768510.66	0.0063	0.0024
Venus	49412-11-10 01:55 G	19768735.57	19768735.58	19768735.65	0.0063	0.0063
Mars	49415-11-28 11:17 G	19769848.81	19769848.97	19769849.20	0.0064	0.0051
Moon	49420-10-29 18:14 G	19771646.03	19771646.26	19771646.52	0.0066	0.0016
Earth	49420-10-29 20:24 G	19771646.10	19771646.35	19771646.60	0.0066	0.0013 *
Mercury	49424-02-02 09:22 G	19772836.86	19772836.89	19772836.96	0.0068	0.0063
Mercury	49424-04-30 10:05 G	19772924.84	19772924.92	19772925.01	0.0068	0.0052
Mercury	49424-07-27 10:34 G	19773012.85	19773012.94	19773013.06	0.0068	0.0042
Mercury	49424-10-23 11:17 G	19773100.86	19773100.97	19773101.10	0.0068	0.0031
Mercury	49425-01-19 12:00 G	19773188.87	19773189.00	19773189.13	0.0068	0.0020
Mercury	49425-04-17 12:29 G	19773276.89	19773277.02	19773277.16	0.0068	0.0010
Mercury	49425-07-14 13:12 G	19773364.91	19773365.05	19773365.18	0.0068	0.0002
Mercury	49425-10-10 13:41 G	19773452.94	19773453.07	19773453.20	0.0068	0.0012

Mercury	49426-01-06 14:10 G	19773540.97	19773541.09	19773541.22	0.0068	0.0023
Mercury	49426-04-04 14:38 G	19773629.00	19773629.11	19773629.24	0.0069	0.0034
Mercury	49426-07-01 15:07 G	19773717.04	19773717.13	19773717.24	0.0069	0.0045
Mercury	49426-09-27 15:50 G	19773805.09	19773805.16	19773805.24	0.0069	0.0056
Mercury	49426-12-24 16:19 G	19773893.16	19773893.18	19773893.22	0.0069	0.0067
Venus	49501-10-03 11:17 G	19801203.77	19801203.97	19801204.19	0.0081	0.0025
Venus	49502-05-16 21:50 G	19801429.27	19801429.41	19801429.59	0.0081	0.0056
Mars	49505-02-23 02:10 G	19802442.38	19802442.59	19802442.84	0.0079	0.0055
Earth	49507-05-03 16:19 G	19803242.14	19803242.18	19803242.27	0.0078	0.0075
Moon	49507-05-03 16:05 G	19803242.17	19803242.17	19803242.21	0.0078	0.0078 *
Mercury	49510-08-28 15:36 G	19804455.09	19804455.15	19804455.21	0.0076	0.0072
Mercury	49510-11-24 17:31 G	19804543.11	19804543.23	19804543.39	0.0076	0.0051
Mercury	49511-02-20 20:10 G	19804631.17	19804631.34	19804631.52	0.0076	0.0030
Mercury	49511-05-19 22:48 G	19804719.26	19804719.45	19804719.64	0.0076	0.0009
Mercury	49511-08-16 00:58 G	19804807.36	19804807.54	19804807.73	0.0076	0.0012
Mercury	49511-11-12 03:22 G	19804895.47	19804895.64	19804895.82	0.0076	0.0032
Mercury	49512-02-08 05:31 G	19804983.61	19804983.73	19804983.88	0.0075	0.0053
Mercury	49512-05-06 07:55 G	19805071.79	19805071.83	19805071.89	0.0075	0.0073
Venus	49658-04-28 11:02 G	19858389.80	19858389.96	19858390.14	0.0063	0.0040
Venus	49658-12-09 14:38 G	19858614.90	19858615.11	19858615.34	0.0063	0.0003
Venus	49659-07-22 18:14 G	19858840.09	19858840.26	19858840.45	0.0063	0.0036
Mars	49664-03-10 10:48 G	19860532.73	19860532.95	19860533.18	0.0065	0.0044
Jupiter	49664-09-08 01:26 G	19860714.25	19860714.56	19860714.96	0.0065	0.0049
Moon	49667-11-01 19:55 G	19861864.08	19861864.33	19861864.59	0.0066	0.0004
Earth	49667-11-01 22:48 G	19861864.19	19861864.45	19861864.71	0.0066	0.0002 *
Mercury	49671-03-14 20:38 G	19863093.32	19863093.36	19863093.43	0.0068	0.0062
Mercury	49671-06-10 21:22 G	19863181.31	19863181.39	19863181.49	0.0068	0.0051
Mercury	49671-09-06 22:05 G	19863269.32	19863269.42	19863269.53	0.0068	0.0040
Mercury	49671-12-03 22:34 G	19863357.33	19863357.44	19863357.57	0.0068	0.0030
Mercury	49672-02-29 23:17 G	19863445.34	19863445.47	19863445.60	0.0068	0.0019

Mercury	49672-05-27 23:46 G	19863533.36	19863533.49	19863533.63	0.0068	0.0009
Mercury	49672-08-24 00:29 G	19863621.38	19863621.52	19863621.65	0.0068	0.0003
Mercury	49672-11-20 00:58 G	19863709.41	19863709.54	19863709.67	0.0068	0.0013
Mercury	49673-02-16 01:26 G	19863797.44	19863797.56	19863797.69	0.0068	0.0024
Mercury	49673-05-15 02:10 G	19863885.47	19863885.59	19863885.70	0.0069	0.0035
Mercury	49673-08-11 02:38 G	19863973.51	19863973.61	19863973.71	0.0069	0.0046
Mercury	49673-11-07 03:07 G	19864061.57	19864061.63	19864061.71	0.0069	0.0057
Mercury	49674-02-03 03:50 G	19864149.65	19864149.66	19864149.68	0.0069	0.0068
Venus	49749-01-25 08:53 G	19891533.65	19891533.87	19891534.09	0.0081	0.0003
Venus	49749-09-07 19:12 G	19891759.26	19891759.30	19891759.38	0.0081	0.0078
Moon	49755-05-07 18:43 G	19893827.12	19893827.28	19893827.51	0.0078	0.0054
Earth	49755-05-07 18:43 G	19893827.13	19893827.28	19893827.48	0.0078	0.0058 *
Mercury	49757-10-08 00:29 G	19894711.47	19894711.52	19894711.59	0.0076	0.0072
Mercury	49758-01-04 03:07 G	19894799.49	19894799.63	19894799.77	0.0076	0.0051
Mercury	49758-04-02 05:17 G	19894887.56	19894887.72	19894887.91	0.0076	0.0030
Mercury	49758-06-29 07:55 G	19894975.64	19894975.83	19894976.02	0.0076	0.0009
Mercury	49758-09-25 10:05 G	19895063.74	19895063.92	19895064.12	0.0076	0.0012
Mercury	49758-12-22 12:14 G	19895151.86	19895152.01	19895152.20	0.0076	0.0033
Mercury	49759-03-20 14:53 G	19895239.99	19895240.12	19895240.26	0.0075	0.0053
Mercury	49759-06-16 16:48 G	19895328.18	19895328.20	19895328.27	0.0075	0.0074
Venus	49905-01-09 04:48 G	19948494.65	19948494.70	19948494.80	0.0063	0.0059
Venus	49905-08-22 08:38 G	19948719.67	19948719.86	19948720.08	0.0063	0.0022
Venus	49906-04-04 12:29 G	19948944.81	19948945.02	19948945.24	0.0063	0.0016
Venus	49906-11-15 15:50 G	19949170.07	19949170.16	19949170.29	0.0063	0.0055
Mars	49910-08-02 07:12 G	19950525.65	19950525.80	19950526.03	0.0065	0.0052
Moon	49914-11-06 01:12 G	19952082.30	19952082.55	19952082.81	0.0066	0.0005
Earth	49914-11-06 04:48 G	19952082.44	19952082.70	19952082.96	0.0066	0.0004 *
Mercury	49918-01-28 08:10 G	19953261.82	19953261.84	19953261.89	0.0068	0.0066
Mercury	49918-04-26 08:53 G	19953349.80	19953349.87	19953349.96	0.0068	0.0055
Mercury	49918-07-23 09:36 G	19953437.80	19953437.90	19953438.00	0.0068	0.0044

Mercury	49918-10-19 09:50 G	19953525.81	19953525.91	19953526.04	0.0068	0.0034
Mercury	49919-01-15 10:34 G	19953613.82	19953613.94	19953614.07	0.0068	0.0023
Mercury	49919-04-13 11:17 G	19953701.84	19953701.97	19953702.10	0.0068	0.0012
Mercury	49919-07-10 11:46 G	19953789.86	19953789.99	19953790.13	0.0068	0.0002
Mercury	49919-10-06 12:29 G	19953877.88	19953878.02	19953878.15	0.0068	0.0009
Mercury	49920-01-02 12:43 G	19953965.91	19953966.03	19953966.17	0.0068	0.0021
Mercury	49920-03-30 13:12 G	19954053.94	19954054.05	19954054.19	0.0069	0.0032
Mercury	49920-06-26 14:10 G	19954141.98	19954142.09	19954142.19	0.0069	0.0042
Mercury	49920-09-22 14:38 G	19954230.03	19954230.11	19954230.20	0.0069	0.0053
Mercury	49920-12-19 15:07 G	19954318.09	19954318.13	19954318.18	0.0069	0.0064
Venus	49995-10-08 00:29 G	19981638.33	19981638.52	19981638.71	0.0081	0.0039
Venus	49996-05-20 11:17 G	19981863.78	19981863.97	19981864.16	0.0081	0.0042

# 51ST MILLENNIUM CE

This is a list of transits visible from Pluto in the 51st millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Earth	50002-05-11 02:53 G	19984045.47	19984045.62	19984045.79	0.0078	0.0061		
Moon	50002-05-11 04:05 G	19984045.53	19984045.67	19984045.85	0.0078	0.0062 *		
Mercury	50004-11-18 12:14 G	19984967.88	19984968.01	19984968.14	0.0076	0.0056		
Mercury	50005-02-14 14:24 G	19985055.94	19985056.10	19985056.28	0.0076	0.0035		
Mercury	50005-05-13 17:02 G	19985144.02	19985144.21	19985144.40	0.0076	0.0014		
Mercury	50005-08-09 19:26 G	19985232.12	19985232.31	19985232.50	0.0076	0.0007		
Mercury	50005-11-05 21:36 G	19985320.23	19985320.40	19985320.58	0.0076	0.0028		

Mercury	50006-02-02 00:00 G	19985408.36	19985408.50	19985408.65	0.0076	0.0048
Mercury	50006-05-01 02:10 G	19985496.53	19985496.59	19985496.68	0.0075	0.0069
Venus	50152-05-03 05:02 G	20038824.53	20038824.71	20038824.91	0.0063	0.0032
Venus	50152-12-14 08:53 G	20039049.65	20039049.87	20039050.09	0.0063	0.0005
Venus	50153-07-27 12:14 G	20039274.86	20039275.01	20039275.18	0.0063	0.0044
Moon	50161-11-08 11:02 G	20042300.71	20042300.96	20042301.22	0.0066	0.0010
Earth	50161-11-08 14:24 G	20042300.85	20042301.10	20042301.37	0.0066	0.0007 *
Mercury	50164-12-11 20:24 G	20043430.31	20043430.35	20043430.40	0.0068	0.0064
Mercury	50165-03-09 20:38 G	20043518.30	20043518.36	20043518.46	0.0068	0.0054
Mercury	50165-06-05 21:22 G	20043606.30	20043606.39	20043606.51	0.0068	0.0043
Mercury	50165-09-01 22:05 G	20043694.31	20043694.42	20043694.55	0.0068	0.0032
Mercury	50165-11-28 22:48 G	20043782.32	20043782.45	20043782.58	0.0068	0.0021
Mercury	50166-02-24 23:17 G	20043870.34	20043870.47	20043870.61	0.0068	0.0011
Mercury	50166-05-24 00:00 G	20043958.36	20043958.50	20043958.63	0.0068	0.0001
Mercury	50166-08-20 00:29 G	20044046.39	20044046.52	20044046.65	0.0068	0.0011
Mercury	50166-11-16 00:58 G	20044134.42	20044134.54	20044134.67	0.0068	0.0022
Mercury	50167-02-12 01:26 G	20044222.45	20044222.56	20044222.69	0.0069	0.0033
Mercury	50167-05-11 02:10 G	20044310.49	20044310.59	20044310.70	0.0069	0.0044
Mercury	50167-08-07 02:38 G	20044398.54	20044398.61	20044398.70	0.0069	0.0055
Mercury	50167-11-03 03:07 G	20044486.61	20044486.63	20044486.68	0.0069	0.0066
Venus	50242-06-19 17:46 G	20071743.13	20071743.24	20071743.40	0.0081	0.0065
Venus	50243-01-31 05:17 G	20071968.51	20071968.72	20071968.94	0.0081	0.0017
Mars	50246-03-20 01:55 G	20073112.34	20073112.58	20073112.87	0.0079	0.0044
Earth	50249-05-14 14:10 G	20074264.07	20074264.09	20074264.14	0.0078	0.0077
Mercury	50251-07-07 19:26 G	20075048.30	20075048.31	20075048.36	0.0076	0.0076
Mercury	50251-10-03 22:05 G	20075136.30	20075136.42	20075136.56	0.0076	0.0054
Mercury	50251-12-31 00:29 G	20075224.36	20075224.52	20075224.70	0.0076	0.0034
Mercury	50252-03-28 03:07 G	20075312.44	20075312.63	20075312.82	0.0076	0.0012
Mercury	50252-06-24 05:31 G	20075400.54	20075400.73	20075400.92	0.0076	0.0008
Mercury	50252-09-20 07:41 G	20075488.65	20075488.82	20075489.00	0.0076	0.0029



Mercury	50252-12-17 09:50 G	20075576.79	20075576.91	20075577.07	0.0076	0.0050
Mercury	50253-03-15 12:29 G	20075664.96	20075665.02	20075665.09	0.0075	0.0070
Venus	50399-01-14 02:24 G	20128929.44	20128929.60	20128929.79	0.0063	0.0038
Venus	50399-08-27 06:29 G	20129154.55	20129154.77	20129154.99	0.0063	0.0001
Venus	50400-04-08 09:50 G	20129379.75	20129379.91	20129380.10	0.0063	0.0038
Mars	50405-04-06 03:50 G	20131203.35	20131203.66	20131203.98	0.0065	0.0002
Moon	50408-11-12 00:43 G	20132519.29	20132519.53	20132519.79	0.0066	0.0023
Earth	50408-11-12 03:22 G	20132519.41	20132519.64	20132519.89	0.0066	0.0026 *
Mercury	50411-10-27 08:38 G	20133598.81	20133598.86	20133598.95	0.0068	0.0059
Mercury	50412-01-23 09:22 G	20133686.81	20133686.89	20133687.00	0.0068	0.0048
Mercury	50412-04-20 10:05 G	20133774.81	20133774.92	20133775.04	0.0068	0.0037
Mercury	50412-07-17 10:34 G	20133862.82	20133862.94	20133863.07	0.0068	0.0027
Mercury	50412-10-13 11:17 G	20133950.84	20133950.97	20133951.10	0.0068	0.0016
Mercury	50413-01-09 12:00 G	20134038.86	20134039.00	20134039.13	0.0068	0.0005
Mercury	50413-04-07 12:29 G	20134126.89	20134127.02	20134127.16	0.0068	0.0006
Mercury	50413-07-04 12:58 G	20134214.91	20134215.04	20134215.18	0.0068	0.0017
Mercury	50413-09-30 13:26 G	20134302.94	20134303.06	20134303.19	0.0068	0.0028
Mercury	50413-12-27 14:10 G	20134390.98	20134391.09	20134391.20	0.0069	0.0039
Mercury	50414-03-25 14:38 G	20134479.03	20134479.11	20134479.21	0.0069	0.0050
Mercury	50414-06-21 15:07 G	20134567.08	20134567.13	20134567.20	0.0069	0.0061
Venus	50489-02-28 15:50 G	20161848.07	20161848.16	20161848.28	0.0081	0.0072
Venus	50489-10-12 03:07 G	20162073.41	20162073.63	20162073.85	0.0081	0.0010
Moon	50495-05-16 01:41 G	20164115.37	20164115.57	20164115.83	0.0078	0.0038
Earth	50495-05-16 05:17 G	20164115.53	20164115.72	20164115.97	0.0078	0.0042 *
Mercury	50498-05-21 07:26 G	20165216.72	20165216.81	20165216.94	0.0076	0.0062
Mercury	50498-08-17 10:05 G	20165304.77	20165304.92	20165305.08	0.0076	0.0040
Mercury	50498-11-13 12:29 G	20165392.84	20165393.02	20165393.21	0.0076	0.0020
Mercury	50499-02-09 14:53 G	20165480.93	20165481.12	20165481.31	0.0076	0.0001
Mercury	50499-05-08 17:17 G	20165569.04	20165569.22	20165569.40	0.0076	0.0022
Mercury	50499-08-04 19:26 G	20165657.16	20165657.31	20165657.47	0.0076	0.0043

Mercury	50499-10-31 21:22 G	20165745.31	20165745.39	20165745.52	0.0076	0.0064
Venus	50645-09-26 02:24 G	20219034.44	20219034.60	20219034.81	0.0063	0.0036
Venus	50646-05-09 06:29 G	20219259.55	20219259.77	20219259.99	0.0063	0.0002
Venus	50646-12-20 09:50 G	20219484.75	20219484.91	20219485.10	0.0063	0.0040
Mars	50651-08-28 19:12 G	20221197.23	20221197.30	20221197.45	0.0065	0.0061
Moon	50654-11-15 05:31 G	20222371.56	20222371.73	20222371.95	0.0066	0.0041
Earth	50654-11-15 05:46 G	20222371.57	20222371.74	20222371.98	0.0066	0.0041 *
Moon	50655-11-16 18:58 G	20222738.17	20222738.29	20222738.43	0.0067	0.0058
Earth	50655-11-16 19:26 G	20222738.22	20222738.31	20222738.48	0.0067	0.0058 *
Mercury	50658-06-14 21:36 G	20223679.33	20223679.40	20223679.47	0.0068	0.0058
Mercury	50658-09-10 21:50 G	20223767.33	20223767.41	20223767.52	0.0068	0.0048
Mercury	50658-12-07 22:34 G	20223855.33	20223855.44	20223855.56	0.0068	0.0037
Mercury	50659-03-05 23:17 G	20223943.35	20223943.47	20223943.60	0.0068	0.0026
Mercury	50659-06-01 23:46 G	20224031.36	20224031.49	20224031.63	0.0068	0.0016
Mercury	50659-08-29 00:29 G	20224119.38	20224119.52	20224119.66	0.0068	0.0005
Mercury	50659-11-25 00:58 G	20224207.41	20224207.54	20224207.68	0.0068	0.0006
Mercury	50660-02-21 01:26 G	20224295.44	20224295.56	20224295.70	0.0068	0.0017
Mercury	50660-05-19 02:10 G	20224383.47	20224383.59	20224383.72	0.0068	0.0028
Mercury	50660-08-15 02:38 G	20224471.51	20224471.61	20224471.73	0.0069	0.0039
Mercury	50660-11-11 03:22 G	20224559.55	20224559.64	20224559.73	0.0069	0.0050
Mercury	50661-02-07 03:50 G	20224647.61	20224647.66	20224647.73	0.0069	0.0061
Venus	50735-11-12 15:07 G	20251953.04	20251953.13	20251953.26	0.0081	0.0071
Venus	50736-06-25 02:24 G	20252178.39	20252178.60	20252178.82	0.0081	0.0010
Moon	50742-05-21 00:00 G	20254334.23	20254334.50	20254334.76	0.0078	0.0004
Earth	50742-05-21 02:10 G	20254334.34	20254334.59	20254334.86	0.0078	0.0007 *
Mercury	50745-01-07 17:46 G	20255297.16	20255297.24	20255297.37	0.0076	0.0064
Mercury	50745-04-05 20:24 G	20255385.20	20255385.35	20255385.52	0.0076	0.0042
Mercury	50745-07-02 22:48 G	20255473.28	20255473.45	20255473.64	0.0076	0.0021
Mercury	50745-09-29 01:26 G	20255561.37	20255561.56	20255561.75	0.0076	0.0001
Mercury	50745-12-26 03:22 G	20255649.47	20255649.64	20255649.84	0.0076	0.0021

Mercury	50746-03-24 05:46 G	20255737.59	20255737.74	20255737.91	0.0076	0.0041
Mercury	50746-06-20 07:55 G	20255825.74	20255825.83	20255825.96	0.0076	0.0062
Venus	50892-06-07 04:05 G	20309139.48	20309139.67	20309139.87	0.0063	0.0029
Venus	50893-01-18 07:41 G	20309364.60	20309364.82	20309365.04	0.0063	0.0008
Venus	50893-08-31 11:31 G	20309589.83	20309589.98	20309590.13	0.0063	0.0046
Moon	50901-11-18 23:17 G	20312590.22	20312590.47	20312590.72	0.0066	0.0002
Earth	50901-11-19 01:41 G	20312590.31	20312590.57	20312590.83	0.0066	0.0001 *
Mercury	50904-11-04 10:05 G	20313671.89	20313671.92	20313671.96	0.0068	0.0065
Mercury	50905-01-31 10:19 G	20313759.87	20313759.93	20313760.03	0.0068	0.0055
Mercury	50905-04-29 11:02 G	20313847.87	20313847.96	20313848.07	0.0068	0.0044
Mercury	50905-07-26 11:46 G	20313935.88	20313935.99	20313936.11	0.0068	0.0033
Mercury	50905-10-22 12:29 G	20314023.89	20314024.02	20314024.15	0.0068	0.0022
Mercury	50906-01-18 12:58 G	20314111.91	20314112.04	20314112.18	0.0068	0.0012
Mercury	50906-04-16 13:26 G	20314199.93	20314200.06	20314200.20	0.0068	0.0002
Mercury	50906-07-13 14:10 G	20314287.95	20314288.09	20314288.22	0.0068	0.0010
Mercury	50906-10-09 14:24 G	20314375.98	20314376.10	20314376.24	0.0068	0.0022
Mercury	50907-01-05 14:53 G	20314464.02	20314464.12	20314464.26	0.0068	0.0033
Mercury	50907-04-03 15:50 G	20314552.06	20314552.16	20314552.27	0.0069	0.0043
Mercury	50907-06-30 16:19 G	20314640.10	20314640.18	20314640.27	0.0069	0.0054
Mercury	50907-09-26 17:02 G	20314728.17	20314728.21	20314728.25	0.0069	0.0065
Venus	50982-07-24 18:29 G	20342058.13	20342058.27	20342058.45	0.0081	0.0055
Venus	50983-03-07 05:31 G	20342283.54	20342283.73	20342283.96	0.0081	0.0026
Mars	50987-04-17 18:14 G	20343786.07	20343786.26	20343786.49	0.0079	0.0059
Earth	50989-05-24 03:22 G	20344553.58	20344553.64	20344553.73	0.0078	0.0074
Moon	50989-05-24 03:22 G	20344553.58	20344553.64	20344553.73	0.0078	0.0074 *
Mercury	50991-05-30 03:22 G	20345289.63	20345289.64	20345289.69	0.0077	0.0076
Mercury	50991-08-26 05:46 G	20345377.63	20345377.74	20345377.89	0.0076	0.0055
Mercury	50991-11-22 08:24 G	20345465.69	20345465.85	20345466.03	0.0076	0.0033
Mercury	50992-02-18 10:48 G	20345553.77	20345553.95	20345554.14	0.0076	0.0012
Mercury	50992-05-16 13:12 G	20345641.87	20345642.05	20345642.24	0.0076	0.0009

Mercury 50992-08-12 15:22 G 20345729.98 20345730.14 20345730.33 0.0076 0.0030

Mercury 50992-11-08 17:46 G 20345818.11 20345818.24 20345818.39 0.0076 0.0050

Mercury 50993-02-04 19:55 G 20345906.28 20345906.33 20345906.41 0.0076 0.0071

# 52ND MILLENNIUM CE

This is a list of transits visible from Pluto in the 52nd millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	51138-07-09 04:19 G		20399019.57	20399019.68	20399019.83	0.0063	0.0051	
Venus	51139-02-19 08:10 G		20399244.63	20399244.84	20399245.07	0.0063	0.0014	
Venus	51139-10-02 11:46 G		20399469.80	20399469.99	20399470.21	0.0063	0.0024	
Venus	51140-05-14 15:22 G		20399695.11	20399695.14	20399695.21	0.0063	0.0062	
Mars	51146-05-05 06:58 G		20401876.71	20401876.79	20401876.88	0.0066	0.0063	
Earth	51147-11-22 11:31 G		20402442.81	20402442.98	20402443.20	0.0066	0.0044	
Moon	51147-11-22 14:38 G		20402442.96	20402443.11	20402443.32	0.0066	0.0047	*
Moon	51148-11-22 21:50 G		20402809.30	20402809.41	20402809.57	0.0067	0.0057	
Earth	51148-11-23 01:12 G		20402809.43	20402809.55	20402809.74	0.0067	0.0054	*
Mercury	51151-03-27 23:17 G		20403664.44	20403664.47	20403664.51	0.0068	0.0065	
Mercury	51151-06-23 23:46 G		20403752.42	20403752.49	20403752.58	0.0068	0.0054	
Mercury	51151-09-20 00:14 G		20403840.42	20403840.51	20403840.63	0.0068	0.0044	
Mercury	51151-12-17 00:58 G		20403928.43	20403928.54	20403928.67	0.0068	0.0033	
Mercury	51152-03-14 01:41 G		20404016.44	20404016.57	20404016.70	0.0068	0.0022	
Mercury	51152-06-10 02:10 G		20404104.46	20404104.59	20404104.73	0.0068	0.0012	

Mercury	51152-09-06 02:53 G	20404192.48	20404192.62	20404192.76	0.0068	0.0001
Mercury	51152-12-03 03:22 G	20404280.51	20404280.64	20404280.78	0.0068	0.0010
Mercury	51153-03-01 03:50 G	20404368.54	20404368.66	20404368.80	0.0068	0.0022
Mercury	51153-05-28 04:19 G	20404456.57	20404456.68	20404456.81	0.0068	0.0033
Mercury	51153-08-24 04:48 G	20404544.61	20404544.70	20404544.82	0.0069	0.0044
Mercury	51153-11-20 05:31 G	20404632.66	20404632.73	20404632.82	0.0069	0.0054
Mercury	51154-02-16 06:00 G	20404720.73	20404720.75	20404720.81	0.0069	0.0066
Venus	51229-04-06 00:58 G	20432163.35	20432163.54	20432163.77	0.0081	0.0027
Venus	51229-11-17 11:46 G	20432388.84	20432388.99	20432389.17	0.0081	0.0054
Mars	51233-09-08 18:58 G	20433779.98	20433780.29	20433780.61	0.0079	0.0007
Moon	51235-05-27 04:05 G	20434405.42	20434405.67	20434405.93	0.0078	0.0004
Earth	51235-05-27 06:58 G	20434405.53	20434405.79	20434406.05	0.0078	0.0002 *
Mercury	51238-01-15 16:34 G	20435370.09	20435370.19	20435370.33	0.0076	0.0059
Mercury	51238-04-13 19:12 G	20435458.15	20435458.30	20435458.47	0.0076	0.0037
Mercury	51238-07-10 21:36 G	20435546.22	20435546.40	20435546.59	0.0076	0.0016
Mercury	51238-10-07 00:00 G	20435634.32	20435634.50	20435634.69	0.0076	0.0005
Mercury	51239-01-03 02:10 G	20435722.43	20435722.59	20435722.78	0.0076	0.0026
Mercury	51239-04-01 04:34 G	20435810.55	20435810.69	20435810.85	0.0076	0.0046
Mercury	51239-06-28 06:43 G	20435898.71	20435898.78	20435898.88	0.0076	0.0067
Venus	51385-03-20 09:36 G	20489124.73	20489124.90	20489125.11	0.0063	0.0032
Venus	51385-10-31 13:26 G	20489349.85	20489350.06	20489350.29	0.0063	0.0006
Venus	51386-06-13 16:48 G	20489575.06	20489575.20	20489575.38	0.0063	0.0044
Mars	51392-09-25 14:38 G	20491870.87	20491871.11	20491871.39	0.0066	0.0037
Earth	51394-11-25 14:10 G	20492661.84	20492662.09	20492662.34	0.0066	0.0017
Moon	51394-11-25 15:50 G	20492661.93	20492662.16	20492662.41	0.0066	0.0020 *
Mercury	51397-08-16 12:58 G	20493657.00	20493657.04	20493657.10	0.0068	0.0062
Mercury	51397-11-12 13:26 G	20493744.98	20493745.06	20493745.16	0.0068	0.0052
Mercury	51398-02-08 14:10 G	20493832.99	20493833.09	20493833.20	0.0068	0.0041
Mercury	51398-05-07 14:38 G	20493921.00	20493921.11	20493921.24	0.0068	0.0030
Mercury	51398-08-03 15:22 G	20494009.01	20494009.14	20494009.28	0.0068	0.0019

Mercury	51398-10-30 16:05 G	20494097.03	20494097.17	20494097.30	0.0068	0.0008
Mercury	51399-01-26 16:34 G	20494185.06	20494185.19	20494185.33	0.0068	0.0003
Mercury	51399-04-24 17:02 G	20494273.08	20494273.21	20494273.35	0.0068	0.0014
Mercury	51399-07-21 17:46 G	20494361.11	20494361.24	20494361.37	0.0068	0.0024
Mercury	51399-10-17 18:14 G	20494449.15	20494449.26	20494449.38	0.0068	0.0035
Mercury	51400-01-13 18:43 G	20494537.19	20494537.28	20494537.39	0.0069	0.0047
Mercury	51400-04-11 19:12 G	20494625.24	20494625.30	20494625.38	0.0069	0.0058
Mercury	51400-07-08 20:10 G	20494713.34	20494713.34	20494713.34	0.0069	0.0069
Venus	51475-05-07 00:00 G	20522043.37	20522043.50	20522043.65	0.0081	0.0062
Venus	51475-12-18 10:48 G	20522268.75	20522268.95	20522269.18	0.0081	0.0019
Mars	51480-02-01 08:10 G	20523774.55	20523774.84	20523775.16	0.0079	0.0021
Earth	51481-05-29 15:36 G	20524258.00	20524258.15	20524258.35	0.0078	0.0058
Moon	51481-05-29 18:43 G	20524258.15	20524258.28	20524258.46	0.0078	0.0061 *
Mercury	51484-03-11 03:07 G	20525274.57	20525274.63	20525274.69	0.0077	0.0072
Mercury	51484-06-07 05:31 G	20525362.59	20525362.73	20525362.87	0.0076	0.0051
Mercury	51484-09-03 07:26 G	20525450.65	20525450.81	20525451.00	0.0076	0.0030
Mercury	51484-11-30 10:05 G	20525538.74	20525538.92	20525539.11	0.0076	0.0009
Mercury	51485-02-26 12:29 G	20525626.84	20525627.02	20525627.21	0.0076	0.0012
Mercury	51485-05-25 14:38 G	20525714.95	20525715.11	20525715.29	0.0076	0.0033
Mercury	51485-08-21 16:48 G	20525803.08	20525803.20	20525803.35	0.0076	0.0054
Mercury	51485-11-17 19:12 G	20525891.28	20525891.30	20525891.35	0.0076	0.0074
Venus	51631-04-20 13:41 G	20579004.92	20579005.07	20579005.25	0.0063	0.0041
Venus	51631-12-01 17:31 G	20579230.01	20579230.23	20579230.45	0.0063	0.0004
Venus	51632-07-13 20:53 G	20579455.20	20579455.37	20579455.57	0.0063	0.0033
Mars	51639-02-18 05:02 G	20581865.44	20581865.71	20581866.03	0.0066	0.0025
Earth	51640-11-28 07:12 G	20582514.55	20582514.80	20582515.06	0.0066	0.0006
Moon	51640-11-28 09:07 G	20582514.62	20582514.88	20582515.15	0.0066	0.0004 *
Mercury	51643-10-11 02:38 G	20583561.58	20583561.61	20583561.67	0.0068	0.0064
Mercury	51644-01-07 03:22 G	20583649.56	20583649.64	20583649.73	0.0068	0.0053
Mercury	51644-04-04 04:05 G	20583737.57	20583737.67	20583737.78	0.0068	0.0042

Mercury	51644-07-01 04:34 G	20583825.58	20583825.69	20583825.82	0.0068	0.0032
Mercury	51644-09-27 05:02 G	20583913.59	20583913.71	20583913.85	0.0068	0.0021
Mercury	51644-12-24 05:46 G	20584001.61	20584001.74	20584001.88	0.0068	0.0010
Mercury	51645-03-22 06:29 G	20584089.63	20584089.77	20584089.91	0.0068	0.0001
Mercury	51645-06-18 06:58 G	20584177.66	20584177.79	20584177.93	0.0068	0.0012
Mercury	51645-09-14 07:41 G	20584265.69	20584265.82	20584265.95	0.0068	0.0023
Mercury	51645-12-11 08:10 G	20584353.73	20584353.84	20584353.96	0.0068	0.0034
Mercury	51646-03-09 08:53 G	20584441.77	20584441.87	20584441.97	0.0069	0.0045
Mercury	51646-06-05 09:22 G	20584529.82	20584529.89	20584529.97	0.0069	0.0056
Mercury	51646-09-01 10:05 G	20584617.89	20584617.92	20584617.94	0.0069	0.0067
Venus	51722-01-17 12:58 G	20612148.82	20612149.04	20612149.27	0.0081	0.0005
Venus	51722-08-30 23:46 G	20612374.42	20612374.49	20612374.57	0.0081	0.0075
Mars	51726-06-26 03:22 G	20613769.38	20613769.64	20613769.96	0.0079	0.0030
Earth	51728-06-03 07:26 G	20614477.69	20614477.81	20614477.99	0.0078	0.0063
Moon	51728-06-03 08:38 G	20614477.74	20614477.86	20614478.00	0.0078	0.0066 *
Mercury	51730-08-01 16:19 G	20615267.08	20615267.18	20615267.33	0.0077	0.0057
Mercury	51730-10-28 18:58 G	20615355.13	20615355.29	20615355.46	0.0076	0.0036
Mercury	51731-01-24 21:22 G	20615443.21	20615443.39	20615443.58	0.0076	0.0015
Mercury	51731-04-22 23:46 G	20615531.31	20615531.49	20615531.68	0.0076	0.0007
Mercury	51731-07-20 01:55 G	20615619.41	20615619.58	20615619.76	0.0076	0.0027
Mercury	51731-10-16 04:05 G	20615707.54	20615707.67	20615707.83	0.0076	0.0048
Mercury	51732-01-12 06:14 G	20615795.70	20615795.76	20615795.86	0.0076	0.0069
Venus	51877-05-20 18:29 G	20668885.14	20668885.27	20668885.41	0.0063	0.0049
Venus	51877-12-31 22:05 G	20669110.20	20669110.42	20669110.64	0.0063	0.0012
Venus	51878-08-14 01:26 G	20669335.37	20669335.56	20669335.78	0.0063	0.0025
Venus	51879-03-27 05:02 G	20669560.70	20669560.71	20669560.76	0.0063	0.0063
Mars	51885-07-12 23:02 G	20671860.17	20671860.46	20671860.78	0.0066	0.0016
Moon	51886-12-01 21:22 G	20672367.17	20672367.39	20672367.65	0.0066	0.0026
Earth	51886-12-02 00:58 G	20672367.32	20672367.54	20672367.79	0.0066	0.0027 *
Mercury	51889-12-04 16:48 G	20673466.17	20673466.20	20673466.25	0.0068	0.0064

Mercury	51890-03-02 17:31 G	20673554.15	20673554.23	20673554.32	0.0068	0.0053
Mercury	51890-05-29 18:00 G	20673642.15	20673642.25	20673642.36	0.0068	0.0043
Mercury	51890-08-25 18:29 G	20673730.16	20673730.27	20673730.40	0.0068	0.0032
Mercury	51890-11-21 19:12 G	20673818.17	20673818.30	20673818.43	0.0068	0.0021
Mercury	51891-02-17 19:55 G	20673906.19	20673906.33	20673906.46	0.0068	0.0010
Mercury	51891-05-16 20:24 G	20673994.22	20673994.35	20673994.49	0.0068	0.0002
Mercury	51891-08-12 21:07 G	20674082.24	20674082.38	20674082.51	0.0068	0.0012
Mercury	51891-11-08 21:36 G	20674170.27	20674170.40	20674170.53	0.0068	0.0023
Mercury	51892-02-04 22:05 G	20674258.31	20674258.42	20674258.54	0.0068	0.0034
Mercury	51892-05-02 22:34 G	20674346.35	20674346.44	20674346.55	0.0069	0.0045
Mercury	51892-07-29 23:17 G	20674434.40	20674434.47	20674434.55	0.0069	0.0056
Mercury	51892-10-25 23:46 G	20674522.47	20674522.49	20674522.53	0.0069	0.0067
Venus	51968-02-17 16:48 G	20702028.99	20702029.20	20702029.42	0.0081	0.0018
Venus	51968-09-30 03:22 G	20702254.51	20702254.64	20702254.80	0.0081	0.0061
Mars	51972-11-18 05:46 G	20703764.46	20703764.74	20703765.06	0.0079	0.0023
Earth	51974-06-07 00:29 G	20704330.30	20704330.52	20704330.77	0.0078	0.0034
Moon	51974-06-07 03:22 G	20704330.42	20704330.64	20704330.89	0.0078	0.0037 *
Mercury	51976-06-29 02:38 G	20705083.61	20705083.61	20705083.63	0.0077	0.0077
Mercury	51976-09-25 04:48 G	20705171.59	20705171.70	20705171.84	0.0077	0.0056
Mercury	51976-12-22 07:12 G	20705259.65	20705259.80	20705259.98	0.0076	0.0035
Mercury	51977-03-20 09:36 G	20705347.72	20705347.90	20705348.09	0.0076	0.0014
Mercury	51977-06-16 12:00 G	20705435.82	20705436.00	20705436.19	0.0076	0.0008
Mercury	51977-09-12 14:24 G	20705523.93	20705524.10	20705524.28	0.0076	0.0028
Mercury	51977-12-09 16:34 G	20705612.06	20705612.19	20705612.34	0.0076	0.0049
Mercury	51978-03-07 18:43 G	20705700.22	20705700.28	20705700.37	0.0076	0.0070

# 53RD MILLENNIUM CE



**This is a list of transits visible from Pluto in the 53rd millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	52123-06-21 00:29	G	20758765.42	20758765.52	20758765.68	0.0063	0.0051	
Venus	52124-02-01 04:34	G	20758990.48	20758990.69	20758990.91	0.0063	0.0014	
Venus	52124-09-13 08:10	G	20759215.65	20759215.84	20759216.06	0.0063	0.0024	
Venus	52125-04-26 12:14	G	20759440.95	20759441.01	20759441.07	0.0063	0.0061	
Mars	52131-12-05 20:38	G	20761855.08	20761855.36	20761855.69	0.0066	0.0021	
Earth	52132-12-04 22:19	G	20762220.22	20762220.43	20762220.65	0.0066	0.0036	
Moon	52132-12-04 22:34	G	20762220.26	20762220.44	20762220.67	0.0066	0.0037	*
Moon	52133-12-06 09:50	G	20762586.85	20762586.91	20762586.99	0.0067	0.0064	
Earth	52133-12-06 11:46	G	20762586.93	20762586.99	20762587.10	0.0067	0.0063	*
Mercury	52136-01-29 07:41	G	20763370.75	20763370.82	20763370.88	0.0068	0.0059	
Mercury	52136-04-26 07:55	G	20763458.75	20763458.83	20763458.94	0.0068	0.0049	
Mercury	52136-07-23 08:38	G	20763546.75	20763546.86	20763546.98	0.0068	0.0038	
Mercury	52136-10-19 09:22	G	20763634.76	20763634.89	20763635.02	0.0068	0.0027	
Mercury	52137-01-15 09:50	G	20763722.78	20763722.91	20763723.05	0.0068	0.0016	
Mercury	52137-04-13 10:34	G	20763810.80	20763810.94	20763811.07	0.0068	0.0005	
Mercury	52137-07-10 11:02	G	20763898.83	20763898.96	20763899.10	0.0068	0.0006	
Mercury	52137-10-06 11:46	G	20763986.85	20763986.99	20763987.12	0.0068	0.0017	
Mercury	52138-01-02 12:14	G	20764074.89	20764075.01	20764075.14	0.0068	0.0027	
Mercury	52138-03-31 12:43	G	20764162.92	20764163.03	20764163.15	0.0068	0.0039	
Mercury	52138-06-27 13:12	G	20764250.97	20764251.05	20764251.15	0.0069	0.0050	
Mercury	52138-09-23 13:55	G	20764339.03	20764339.08	20764339.15	0.0069	0.0061	
Venus	52214-03-19 22:48	G	20791909.26	20791909.45	20791909.68	0.0081	0.0024	

Venus	52214-10-31 09:36 G	20792134.76	20792134.90	20792135.08	0.0081	0.0057
Mars	52219-04-13 15:07 G	20793759.82	20793760.13	20793760.45	0.0078	0.0002
Moon	52220-06-09 17:17 G	20794182.98	20794183.22	20794183.49	0.0078	0.0018
Earth	52220-06-09 20:38 G	20794183.11	20794183.36	20794183.62	0.0078	0.0017 *
Mercury	52222-08-23 15:36 G	20794988.09	20794988.15	20794988.25	0.0077	0.0070
Mercury	52222-11-19 18:00 G	20795076.12	20795076.25	20795076.41	0.0077	0.0049
Mercury	52223-02-15 20:24 G	20795164.19	20795164.35	20795164.54	0.0076	0.0028
Mercury	52223-05-14 23:02 G	20795252.28	20795252.46	20795252.65	0.0076	0.0006
Mercury	52223-08-11 01:12 G	20795340.38	20795340.55	20795340.74	0.0076	0.0015
Mercury	52223-11-07 03:22 G	20795428.49	20795428.64	20795428.82	0.0076	0.0036
Mercury	52224-02-03 05:31 G	20795516.63	20795516.73	20795516.88	0.0076	0.0057
Venus	52369-07-21 07:12 G	20848645.69	20848645.80	20848645.94	0.0063	0.0052
Venus	52370-03-03 11:02 G	20848870.75	20848870.96	20848871.18	0.0063	0.0015
Venus	52370-10-14 14:38 G	20849095.92	20849096.11	20849096.33	0.0063	0.0022
Venus	52371-05-27 18:14 G	20849321.21	20849321.26	20849321.36	0.0063	0.0060
Mars	52378-04-29 21:07 G	20851850.12	20851850.38	20851850.70	0.0066	0.0026
Earth	52378-12-08 19:26 G	20852073.13	20852073.31	20852073.51	0.0066	0.0045
Moon	52378-12-08 21:50 G	20852073.26	20852073.41	20852073.63	0.0066	0.0048 *
Moon	52379-12-10 06:58 G	20852439.69	20852439.79	20852439.95	0.0067	0.0057
Earth	52379-12-10 09:07 G	20852439.75	20852439.88	20852440.05	0.0067	0.0054 *
Mercury	52381-12-26 21:36 G	20853187.37	20853187.40	20853187.44	0.0067	0.0065
Mercury	52382-03-24 21:50 G	20853275.35	20853275.41	20853275.51	0.0068	0.0055
Mercury	52382-06-20 22:34 G	20853363.35	20853363.44	20853363.56	0.0068	0.0044
Mercury	52382-09-16 23:17 G	20853451.36	20853451.47	20853451.60	0.0068	0.0033
Mercury	52382-12-14 00:00 G	20853539.37	20853539.50	20853539.63	0.0068	0.0022
Mercury	52383-03-12 00:43 G	20853627.39	20853627.53	20853627.66	0.0068	0.0011
Mercury	52383-06-08 01:12 G	20853715.41	20853715.55	20853715.69	0.0068	0.0000
Mercury	52383-09-04 01:41 G	20853803.44	20853803.57	20853803.71	0.0068	0.0011
Mercury	52383-12-01 02:24 G	20853891.47	20853891.60	20853891.73	0.0068	0.0022
Mercury	52384-02-27 02:53 G	20853979.50	20853979.62	20853979.74	0.0068	0.0033

Mercury	52384-05-25 03:22 G	20854067.54	20854067.64	20854067.75	0.0068	0.0044
Mercury	52384-08-21 04:05 G	20854155.59	20854155.67	20854155.75	0.0069	0.0055
Mercury	52384-11-17 04:34 G	20854243.66	20854243.69	20854243.73	0.0069	0.0066
Venus	52460-04-18 06:14 G	20881789.55	20881789.76	20881789.98	0.0081	0.0023
Venus	52460-11-29 16:48 G	20882015.06	20882015.20	20882015.38	0.0081	0.0056
Mars	52465-09-05 02:38 G	20883755.32	20883755.61	20883755.92	0.0078	0.0026
Moon	52466-06-12 17:02 G	20884035.96	20884036.21	20884036.46	0.0078	0.0005
Earth	52466-06-12 17:46 G	20884035.98	20884036.24	20884036.50	0.0078	0.0006 *
Mercury	52468-10-16 05:31 G	20884892.62	20884892.73	20884892.85	0.0077	0.0059
Mercury	52469-01-12 07:55 G	20884980.67	20884980.83	20884980.99	0.0077	0.0038
Mercury	52469-04-10 10:19 G	20885068.75	20885068.93	20885069.11	0.0076	0.0017
Mercury	52469-07-07 12:43 G	20885156.84	20885157.03	20885157.21	0.0076	0.0004
Mercury	52469-10-03 14:38 G	20885244.95	20885245.11	20885245.30	0.0076	0.0026
Mercury	52469-12-30 16:48 G	20885333.07	20885333.20	20885333.37	0.0076	0.0046
Mercury	52470-03-28 18:58 G	20885421.23	20885421.29	20885421.40	0.0076	0.0067
Venus	52615-08-21 16:05 G	20938526.03	20938526.17	20938526.33	0.0063	0.0046
Venus	52616-04-02 19:55 G	20938751.12	20938751.33	20938751.55	0.0063	0.0010
Venus	52616-11-13 23:31 G	20938976.29	20938976.48	20938976.69	0.0063	0.0028
Mars	52624-09-22 03:50 G	20941845.47	20941845.66	20941845.93	0.0066	0.0046
Moon	52624-12-11 18:00 G	20941926.07	20941926.25	20941926.46	0.0066	0.0045
Earth	52624-12-11 20:38 G	20941926.18	20941926.36	20941926.59	0.0066	0.0042 *
Earth	52625-12-13 10:05 G	20942292.83	20942292.92	20942293.09	0.0067	0.0058
Moon	52625-12-13 13:41 G	20942292.99	20942293.07	20942293.20	0.0067	0.0061 *
Mercury	52627-11-24 12:00 G	20943003.99	20943004.00	20943004.05	0.0067	0.0066
Mercury	52628-02-20 12:43 G	20943091.96	20943092.03	20943092.12	0.0068	0.0055
Mercury	52628-05-18 13:26 G	20943179.96	20943180.06	20943180.17	0.0068	0.0044
Mercury	52628-08-14 13:55 G	20943267.97	20943268.08	20943268.21	0.0068	0.0034
Mercury	52628-11-10 14:24 G	20943355.98	20943356.10	20943356.24	0.0068	0.0023
Mercury	52629-02-06 15:07 G	20943444.00	20943444.13	20943444.27	0.0068	0.0012
Mercury	52629-05-05 15:50 G	20943532.02	20943532.16	20943532.30	0.0068	0.0001

Mercury	52629-08-01 16:19 G	20943620.05	20943620.18	20943620.32	0.0068	0.0010
Mercury	52629-10-28 16:48 G	20943708.08	20943708.20	20943708.34	0.0068	0.0022
Mercury	52630-01-24 17:31 G	20943796.11	20943796.23	20943796.35	0.0068	0.0032
Mercury	52630-04-22 18:00 G	20943884.15	20943884.25	20943884.36	0.0068	0.0043
Mercury	52630-07-19 18:29 G	20943972.20	20943972.27	20943972.37	0.0069	0.0055
Mercury	52630-10-15 19:12 G	20944060.27	20944060.30	20944060.35	0.0069	0.0066
Venus	52706-05-20 15:50 G	20971669.94	20971670.16	20971670.38	0.0081	0.0012
Venus	52707-01-01 02:10 G	20971895.49	20971895.59	20971895.74	0.0081	0.0067
Mars	52712-01-30 21:50 G	20973751.30	20973751.41	20973751.59	0.0078	0.0069
Earth	52712-06-16 18:58 G	20973889.04	20973889.29	20973889.55	0.0078	0.0010
Moon	52712-06-16 22:34 G	20973889.18	20973889.44	20973889.70	0.0078	0.0006 *
Mercury	52714-09-14 18:00 G	20974709.15	20974709.25	20974709.36	0.0077	0.0062
Mercury	52714-12-11 20:24 G	20974797.20	20974797.35	20974797.51	0.0077	0.0041
Mercury	52715-03-09 22:48 G	20974885.27	20974885.45	20974885.63	0.0076	0.0020
Mercury	52715-06-06 00:58 G	20974973.36	20974973.54	20974973.73	0.0076	0.0003
Mercury	52715-09-02 03:07 G	20975061.46	20975061.63	20975061.82	0.0076	0.0023
Mercury	52715-11-29 05:17 G	20975149.58	20975149.72	20975149.89	0.0076	0.0043
Mercury	52716-02-25 07:26 G	20975237.73	20975237.81	20975237.93	0.0076	0.0064
Venus	52861-09-20 00:43 G	21028406.38	21028406.53	21028406.71	0.0063	0.0041
Venus	52862-05-03 04:34 G	21028631.48	21028631.69	21028631.92	0.0063	0.0005
Venus	52862-12-14 07:41 G	21028856.66	21028856.82	21028857.03	0.0063	0.0034
Moon	52870-12-14 20:38 G	21031779.19	21031779.36	21031779.58	0.0066	0.0042
Earth	52870-12-14 21:50 G	21031779.22	21031779.41	21031779.64	0.0066	0.0038 *
Mars	52871-02-14 11:31 G	21031840.96	21031840.98	21031841.05	0.0066	0.0066
Earth	52871-12-16 11:17 G	21032145.90	21032145.97	21032146.11	0.0067	0.0061
Moon	52871-12-16 10:48 G	21032145.91	21032145.95	21032146.08	0.0067	0.0064 *
Mercury	52873-10-21 02:38 G	21032820.60	21032820.61	21032820.65	0.0067	0.0066
Mercury	52874-01-17 03:22 G	21032908.57	21032908.64	21032908.73	0.0067	0.0056
Mercury	52874-04-15 04:05 G	21032996.57	21032996.67	21032996.78	0.0068	0.0045
Mercury	52874-07-12 04:48 G	21033084.58	21033084.70	21033084.82	0.0068	0.0034

Mercury	52874-10-08 05:17 G	21033172.60	21033172.72	21033172.85	0.0068	0.0023
Mercury	52875-01-04 06:00 G	21033260.61	21033260.75	21033260.88	0.0068	0.0012
Mercury	52875-04-02 06:29 G	21033348.64	21033348.77	21033348.91	0.0068	0.0002
Mercury	52875-06-29 07:12 G	21033436.66	21033436.80	21033436.93	0.0068	0.0010
Mercury	52875-09-25 07:41 G	21033524.69	21033524.82	21033524.95	0.0068	0.0020
Mercury	52875-12-22 08:10 G	21033612.73	21033612.84	21033612.97	0.0068	0.0032
Mercury	52876-03-19 08:53 G	21033700.77	21033700.87	21033700.98	0.0068	0.0043
Mercury	52876-06-15 09:22 G	21033788.81	21033788.89	21033788.98	0.0069	0.0054
Mercury	52876-09-11 10:05 G	21033876.88	21033876.92	21033876.96	0.0069	0.0065
Venus	52951-11-06 15:07 G	21061325.09	21061325.13	21061325.19	0.0082	0.0079
Venus	52952-06-19 02:10 G	21061550.37	21061550.59	21061550.81	0.0081	0.0001
Venus	52953-01-30 12:14 G	21061776.00	21061776.01	21061776.08	0.0081	0.0080
Moon	52958-06-19 19:41 G	21063742.06	21063742.32	21063742.59	0.0078	0.0013
Earth	52958-06-19 21:07 G	21063742.14	21063742.38	21063742.65	0.0078	0.0017 *
Mercury	52960-08-11 06:43 G	21064525.69	21064525.78	21064525.90	0.0077	0.0063
Mercury	52960-11-07 09:07 G	21064613.74	21064613.88	21064614.05	0.0077	0.0042
Mercury	52961-02-03 11:31 G	21064701.81	21064701.98	21064702.17	0.0077	0.0021
Mercury	52961-05-02 13:55 G	21064789.90	21064790.08	21064790.27	0.0076	0.0001
Mercury	52961-07-29 16:05 G	21064878.00	21064878.17	21064878.36	0.0076	0.0022
Mercury	52961-10-25 18:14 G	21064966.12	21064966.26	21064966.43	0.0076	0.0043
Mercury	52962-01-21 20:24 G	21065054.27	21065054.35	21065054.47	0.0076	0.0063

# 54TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 54th millennium CE.

PLANET	MAX-	C	START	MAX	END	SUNRAD	DEPTH	S
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## TRANSIT

## TIME

Venus	53107-10-22 11:46 G	21118286.81	21118286.99	21118287.20	0.0063	0.0028
Venus	53108-06-03 15:36 G	21118511.94	21118512.15	21118512.37	0.0063	0.0009
Venus	53109-01-14 18:43 G	21118737.16	21118737.28	21118737.46	0.0063	0.0047
Earth	53116-12-19 03:07 G	21121632.41	21121632.63	21121632.90	0.0066	0.0023
Moon	53116-12-19 06:58 G	21121632.56	21121632.79	21121633.04	0.0066	0.0025 *
Mercury	53119-09-19 18:14 G	21122637.21	21122637.26	21122637.33	0.0067	0.0061
Mercury	53119-12-16 18:58 G	21122725.21	21122725.29	21122725.39	0.0068	0.0050
Mercury	53120-03-13 19:26 G	21122813.21	21122813.31	21122813.43	0.0068	0.0039
Mercury	53120-06-09 19:55 G	21122901.22	21122901.33	21122901.47	0.0068	0.0029
Mercury	53120-09-05 20:38 G	21122989.24	21122989.36	21122989.50	0.0068	0.0018
Mercury	53120-12-02 21:22 G	21123077.26	21123077.39	21123077.53	0.0068	0.0007
Mercury	53121-02-28 22:05 G	21123165.28	21123165.42	21123165.56	0.0068	0.0004
Mercury	53121-05-27 22:34 G	21123253.31	21123253.44	21123253.58	0.0068	0.0015
Mercury	53121-08-23 23:02 G	21123341.34	21123341.46	21123341.59	0.0068	0.0026
Mercury	53121-11-19 23:31 G	21123429.38	21123429.48	21123429.61	0.0068	0.0038
Mercury	53122-02-16 00:14 G	21123517.42	21123517.51	21123517.61	0.0068	0.0049
Mercury	53122-05-15 00:43 G	21123605.48	21123605.53	21123605.61	0.0069	0.0060
Venus	53197-12-07 05:02 G	21151205.54	21151205.71	21151205.89	0.0081	0.0051
Venus	53198-07-20 15:50 G	21151430.96	21151431.16	21151431.38	0.0081	0.0029
Moon	53204-06-23 01:26 G	21153595.34	21153595.56	21153595.79	0.0078	0.0037
Earth	53204-06-23 04:05 G	21153595.46	21153595.67	21153595.90	0.0078	0.0041 *
Mercury	53206-04-12 18:29 G	21154254.26	21154254.27	21154254.31	0.0077	0.0076
Mercury	53206-07-09 20:38 G	21154342.25	21154342.36	21154342.51	0.0077	0.0055
Mercury	53206-10-05 23:02 G	21154430.31	21154430.46	21154430.64	0.0077	0.0034
Mercury	53207-01-02 01:41 G	21154518.39	21154518.57	21154518.76	0.0076	0.0012
Mercury	53207-03-31 04:05 G	21154606.48	21154606.67	21154606.85	0.0076	0.0009
Mercury	53207-06-27 06:00 G	21154694.59	21154694.75	21154694.94	0.0076	0.0030
Mercury	53207-09-23 08:38 G	21154782.72	21154782.86	21154783.00	0.0076	0.0050

Mercury	53207-12-20 10:34 G	21154870.89	21154870.94	21154871.02	0.0076	0.0071
Venus	53353-04-09 18:58 G	21207942.17	21207942.29	21207942.42	0.0063	0.0052
Venus	53353-11-20 22:34 G	21208167.23	21208167.44	21208167.66	0.0063	0.0016
Venus	53354-07-04 01:55 G	21208392.39	21208392.58	21208392.81	0.0063	0.0022
Venus	53355-02-14 05:31 G	21208617.67	21208617.73	21208617.84	0.0063	0.0059
Moon	53362-12-22 07:41 G	21211485.55	21211485.82	21211486.08	0.0066	0.0009
Earth	53362-12-22 08:10 G	21211485.59	21211485.84	21211486.10	0.0066	0.0008 *
Mercury	53365-05-20 09:07 G	21212365.87	21212365.88	21212365.89	0.0067	0.0067
Mercury	53365-08-16 09:22 G	21212453.83	21212453.89	21212453.98	0.0067	0.0057
Mercury	53365-11-12 10:05 G	21212541.83	21212541.92	21212542.03	0.0068	0.0046
Mercury	53366-02-08 10:48 G	21212629.84	21212629.95	21212630.07	0.0068	0.0035
Mercury	53366-05-07 11:31 G	21212717.85	21212717.98	21212718.11	0.0068	0.0024
Mercury	53366-08-03 12:00 G	21212805.87	21212806.00	21212806.14	0.0068	0.0013
Mercury	53366-10-30 12:43 G	21212893.89	21212894.03	21212894.17	0.0068	0.0002
Mercury	53367-01-26 13:12 G	21212981.92	21212982.05	21212982.19	0.0068	0.0009
Mercury	53367-04-24 13:41 G	21213069.95	21213070.07	21213070.21	0.0068	0.0020
Mercury	53367-07-21 14:10 G	21213157.98	21213158.09	21213158.23	0.0068	0.0032
Mercury	53367-10-17 14:53 G	21213246.02	21213246.12	21213246.24	0.0068	0.0042
Mercury	53368-01-13 15:22 G	21213334.07	21213334.14	21213334.24	0.0068	0.0054
Mercury	53368-04-10 15:50 G	21213422.14	21213422.16	21213422.22	0.0069	0.0065
Venus	53444-01-07 18:29 G	21241086.06	21241086.27	21241086.49	0.0081	0.0023
Venus	53444-08-20 05:17 G	21241311.57	21241311.72	21241311.89	0.0081	0.0055
Earth	53450-06-27 10:19 G	21243448.83	21243448.93	21243449.10	0.0078	0.0067
Moon	53450-06-27 13:26 G	21243448.94	21243449.06	21243449.23	0.0078	0.0064 *
Mercury	53452-03-10 08:38 G	21244070.79	21244070.86	21244070.96	0.0077	0.0067
Mercury	53452-06-06 11:02 G	21244158.82	21244158.96	21244159.12	0.0077	0.0046
Mercury	53452-09-02 13:26 G	21244246.89	21244247.06	21244247.24	0.0077	0.0025
Mercury	53452-11-29 15:50 G	21244334.98	21244335.16	21244335.35	0.0076	0.0004
Mercury	53453-02-25 18:00 G	21244423.08	21244423.25	21244423.44	0.0076	0.0018
Mercury	53453-05-24 20:10 G	21244511.19	21244511.34	21244511.51	0.0076	0.0039

Mercury	53453-08-20 22:19 G	21244599.33	21244599.43	21244599.56	0.0076	0.0060
Venus	53599-05-11 06:58 G	21297822.63	21297822.79	21297822.99	0.0063	0.0035
Venus	53599-12-22 11:02 G	21298047.74	21298047.96	21298048.18	0.0063	0.0002
Venus	53600-08-03 14:38 G	21298272.94	21298273.11	21298273.29	0.0063	0.0039
Mars	53608-06-05 15:50 G	21301135.94	21301136.16	21301136.43	0.0066	0.0043
Moon	53608-12-25 12:43 G	21301338.80	21301339.03	21301339.29	0.0066	0.0018
Earth	53608-12-25 16:19 G	21301338.94	21301339.18	21301339.44	0.0066	0.0018 *
Mercury	53611-04-18 00:58 G	21302182.47	21302182.54	21302182.61	0.0067	0.0058
Mercury	53611-07-15 01:41 G	21302270.47	21302270.57	21302270.67	0.0068	0.0047
Mercury	53611-10-11 01:55 G	21302358.48	21302358.58	21302358.71	0.0068	0.0037
Mercury	53612-01-07 02:38 G	21302446.49	21302446.61	21302446.74	0.0068	0.0026
Mercury	53612-04-04 03:22 G	21302534.51	21302534.64	21302534.78	0.0068	0.0015
Mercury	53612-07-01 04:05 G	21302622.53	21302622.67	21302622.80	0.0068	0.0004
Mercury	53612-09-27 04:34 G	21302710.55	21302710.69	21302710.83	0.0068	0.0007
Mercury	53612-12-24 05:02 G	21302798.58	21302798.71	21302798.85	0.0068	0.0018
Mercury	53613-03-22 05:46 G	21302886.62	21302886.74	21302886.86	0.0068	0.0029
Mercury	53613-06-18 06:14 G	21302974.66	21302974.76	21302974.87	0.0068	0.0041
Mercury	53613-09-14 06:43 G	21303062.70	21303062.78	21303062.88	0.0068	0.0052
Mercury	53613-12-11 07:26 G	21303150.76	21303150.81	21303150.87	0.0069	0.0063
Venus	53689-06-25 23:46 G	21330741.37	21330741.49	21330741.65	0.0081	0.0063
Venus	53690-02-06 11:02 G	21330966.75	21330966.96	21330967.18	0.0081	0.0017
Moon	53695-06-28 17:17 G	21332935.05	21332935.22	21332935.43	0.0078	0.0052
Earth	53695-06-28 20:10 G	21332935.18	21332935.34	21332935.55	0.0078	0.0055 *
Mars	53695-10-14 12:00 G	21333042.71	21333043.00	21333043.32	0.0078	0.0017
Mercury	53697-11-08 22:05 G	21333799.36	21333799.42	21333799.50	0.0077	0.0070
Mercury	53698-02-05 00:29 G	21333887.38	21333887.52	21333887.66	0.0077	0.0049
Mercury	53698-05-04 02:38 G	21333975.44	21333975.61	21333975.79	0.0077	0.0028
Mercury	53698-07-31 05:02 G	21334063.53	21334063.71	21334063.90	0.0077	0.0007
Mercury	53698-10-27 07:12 G	21334151.62	21334151.80	21334151.99	0.0076	0.0014
Mercury	53699-01-23 09:22 G	21334239.74	21334239.89	21334240.07	0.0076	0.0035



Mercury	53699-04-21 11:17 G	21334327.87	21334327.97	21334328.12	0.0076	0.0057
Venus	53844-10-28 15:07 G	21387478.05	21387478.13	21387478.24	0.0063	0.0056
Venus	53845-06-10 18:43 G	21387703.08	21387703.28	21387703.50	0.0063	0.0020
Venus	53846-01-21 22:34 G	21387928.23	21387928.44	21387928.66	0.0063	0.0017
Venus	53846-09-04 02:10 G	21388153.49	21388153.59	21388153.72	0.0064	0.0054
Earth	53853-12-28 08:24 G	21390825.79	21390825.85	21390825.99	0.0066	0.0062
Moon	53853-12-28 08:53 G	21390825.80	21390825.87	21390826.00	0.0066	0.0061 *
Mars	53854-10-30 09:07 G	21391131.56	21391131.88	21391132.21	0.0066	0.0002
Earth	53854-12-29 22:48 G	21391192.25	21391192.45	21391192.67	0.0067	0.0038
Moon	53854-12-30 00:29 G	21391192.34	21391192.52	21391192.75	0.0067	0.0040 *
Mercury	53856-12-17 15:50 G	21391911.12	21391911.16	21391911.22	0.0067	0.0061
Mercury	53857-03-15 16:34 G	21391999.10	21391999.19	21391999.28	0.0067	0.0051
Mercury	53857-06-11 17:17 G	21392087.11	21392087.22	21392087.33	0.0068	0.0040
Mercury	53857-09-07 17:31 G	21392175.12	21392175.23	21392175.37	0.0068	0.0030
Mercury	53857-12-04 18:14 G	21392263.13	21392263.26	21392263.40	0.0068	0.0019
Mercury	53858-03-02 18:58 G	21392351.15	21392351.29	21392351.43	0.0068	0.0007
Mercury	53858-05-29 19:26 G	21392439.18	21392439.31	21392439.45	0.0068	0.0004
Mercury	53858-08-25 20:10 G	21392527.21	21392527.34	21392527.47	0.0068	0.0014
Mercury	53858-11-21 20:38 G	21392615.24	21392615.36	21392615.49	0.0068	0.0026
Mercury	53859-02-17 21:22 G	21392703.27	21392703.39	21392703.51	0.0068	0.0037
Mercury	53859-05-16 21:50 G	21392791.32	21392791.41	21392791.51	0.0068	0.0048
Mercury	53859-08-12 22:34 G	21392879.37	21392879.44	21392879.51	0.0068	0.0059
Venus	53935-07-28 14:53 G	21420621.93	21420622.12	21420622.34	0.0081	0.0030
Venus	53936-03-10 01:55 G	21420847.42	21420847.58	21420847.77	0.0081	0.0049
Earth	53941-07-03 05:17 G	21422788.48	21422788.72	21422788.98	0.0078	0.0020
Moon	53941-07-03 07:41 G	21422788.59	21422788.82	21422789.08	0.0078	0.0019 *
Mars	53942-03-10 21:36 G	21423039.26	21423039.40	21423039.61	0.0078	0.0064
Mercury	53943-10-08 12:58 G	21423615.92	21423616.04	21423616.16	0.0077	0.0057
Mercury	53944-01-04 15:07 G	21423703.97	21423704.13	21423704.30	0.0077	0.0036
Mercury	53944-04-01 17:31 G	21423792.05	21423792.23	21423792.41	0.0077	0.0015

Mercury	53944-06-28 19:41 G	21423880.14	21423880.32	21423880.51	0.0077	0.0007
Mercury	53944-09-24 21:50 G	21423968.25	21423968.41	21423968.60	0.0076	0.0028
Mercury	53944-12-22 00:00 G	21424056.37	21424056.50	21424056.66	0.0076	0.0048
Mercury	53945-03-20 02:10 G	21424144.53	21424144.59	21424144.69	0.0076	0.0069

# 55TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 55th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	54090-11-28 04:05 G		21477358.51	21477358.67	21477358.86	0.0063	0.0037	
Venus	54091-07-11 08:10 G		21477583.62	21477583.84	21477584.06	0.0063	0.0001	
Venus	54092-02-21 11:17 G		21477808.81	21477808.97	21477809.17	0.0063	0.0037	
Moon	54099-12-31 14:24 G		21480678.89	21480679.10	21480679.32	0.0066	0.0035	
Earth	54099-12-31 17:17 G		21480679.03	21480679.22	21480679.47	0.0066	0.0034	*
Earth	54101-01-02 07:26 G		21481045.81	21481045.81	21481045.83	0.0067	0.0067	
Mars	54101-03-25 04:19 G		21481127.52	21481127.68	21481127.93	0.0067	0.0052	
Mercury	54102-08-19 07:26 G		21481639.76	21481639.81	21481639.86	0.0067	0.0062	
Mercury	54102-11-15 07:41 G		21481727.75	21481727.82	21481727.92	0.0067	0.0051	
Mercury	54103-02-11 08:24 G		21481815.75	21481815.85	21481815.97	0.0068	0.0041	
Mercury	54103-05-10 09:07 G		21481903.76	21481903.88	21481904.01	0.0068	0.0030	
Mercury	54103-08-06 09:36 G		21481991.78	21481991.90	21481992.04	0.0068	0.0019	
Mercury	54103-11-02 10:19 G		21482079.80	21482079.93	21482080.07	0.0068	0.0008	
Mercury	54104-01-29 11:02 G		21482167.82	21482167.96	21482168.10	0.0068	0.0003	

Mercury	54104-04-26 11:31 G	21482255.85	21482255.98	21482256.12	0.0068	0.0014
Mercury	54104-07-23 12:14 G	21482343.88	21482344.01	21482344.14	0.0068	0.0025
Mercury	54104-10-19 12:43 G	21482431.92	21482432.03	21482432.15	0.0068	0.0036
Mercury	54105-01-15 13:12 G	21482519.96	21482520.05	21482520.16	0.0068	0.0048
Mercury	54105-04-13 13:55 G	21482608.02	21482608.08	21482608.15	0.0068	0.0059
Venus	54181-01-13 21:22 G	21510277.26	21510277.39	21510277.52	0.0081	0.0066
Venus	54181-08-27 08:10 G	21510502.63	21510502.84	21510503.07	0.0081	0.0013
Earth	54187-07-06 17:31 G	21512641.99	21512642.23	21512642.48	0.0078	0.0025
Moon	54187-07-06 19:26 G	21512642.07	21512642.31	21512642.57	0.0078	0.0025 *
Mercury	54189-06-08 02:10 G	21513344.48	21513344.59	21513344.71	0.0077	0.0059
Mercury	54189-09-04 04:34 G	21513432.53	21513432.69	21513432.85	0.0077	0.0038
Mercury	54189-12-01 06:58 G	21513520.61	21513520.79	21513520.97	0.0077	0.0017
Mercury	54190-02-27 09:07 G	21513608.70	21513608.88	21513609.07	0.0077	0.0004
Mercury	54190-05-26 11:17 G	21513696.80	21513696.97	21513697.15	0.0076	0.0025
Mercury	54190-08-22 13:26 G	21513784.93	21513785.06	21513785.22	0.0076	0.0046
Mercury	54190-11-18 15:36 G	21513873.08	21513873.15	21513873.25	0.0076	0.0067
Venus	54336-05-18 11:46 G	21567013.94	21567013.99	21567014.11	0.0063	0.0058
Venus	54336-12-29 16:05 G	21567238.97	21567239.17	21567239.38	0.0063	0.0021
Venus	54337-08-11 19:26 G	21567464.11	21567464.31	21567464.54	0.0063	0.0016
Venus	54338-03-24 23:31 G	21567689.36	21567689.48	21567689.61	0.0063	0.0052
Earth	54346-01-05 00:14 G	21570532.27	21570532.51	21570532.78	0.0066	0.0012
Moon	54346-01-05 01:55 G	21570532.34	21570532.58	21570532.84	0.0066	0.0014 *
Mercury	54348-04-19 22:05 G	21571368.40	21571368.42	21571368.47	0.0067	0.0065
Mercury	54348-07-16 22:48 G	21571456.38	21571456.45	21571456.54	0.0067	0.0054
Mercury	54348-10-12 23:31 G	21571544.38	21571544.48	21571544.59	0.0067	0.0044
Mercury	54349-01-09 00:00 G	21571632.39	21571632.50	21571632.63	0.0068	0.0033
Mercury	54349-04-07 00:43 G	21571720.40	21571720.53	21571720.66	0.0068	0.0022
Mercury	54349-07-04 01:26 G	21571808.42	21571808.56	21571808.69	0.0068	0.0011
Mercury	54349-09-30 01:55 G	21571896.44	21571896.58	21571896.72	0.0068	0.0002
Mercury	54349-12-27 02:38 G	21571984.47	21571984.61	21571984.74	0.0068	0.0011

Mercury	54350-03-25 03:07 G	21572072.50	21572072.63	21572072.76	0.0068	0.0022
Mercury	54350-06-21 03:36 G	21572160.54	21572160.65	21572160.78	0.0068	0.0033
Mercury	54350-09-17 04:05 G	21572248.58	21572248.67	21572248.79	0.0068	0.0045
Mercury	54350-12-14 04:48 G	21572336.63	21572336.70	21572336.79	0.0068	0.0056
Mercury	54351-03-12 05:31 G	21572424.71	21572424.73	21572424.76	0.0068	0.0067
Venus	54427-02-14 12:00 G	21600157.81	21600158.00	21600158.21	0.0081	0.0035
Venus	54427-09-27 23:02 G	21600383.28	21600383.46	21600383.65	0.0081	0.0044
Moon	54433-07-09 22:34 G	21602495.28	21602495.44	21602495.65	0.0078	0.0056
Earth	54433-07-10 01:55 G	21602495.43	21602495.58	21602495.78	0.0078	0.0058 *
Mercury	54435-02-07 14:24 G	21603073.03	21603073.10	21603073.20	0.0077	0.0068
Mercury	54435-05-06 16:48 G	21603161.06	21603161.20	21603161.35	0.0077	0.0047
Mercury	54435-08-02 18:58 G	21603249.13	21603249.29	21603249.48	0.0077	0.0026
Mercury	54435-10-29 21:36 G	21603337.21	21603337.40	21603337.58	0.0077	0.0005
Mercury	54436-01-25 23:46 G	21603425.31	21603425.49	21603425.67	0.0077	0.0017
Mercury	54436-04-23 01:55 G	21603513.43	21603513.58	21603513.75	0.0076	0.0038
Mercury	54436-07-20 04:05 G	21603601.56	21603601.67	21603601.80	0.0076	0.0058
Venus	54582-06-18 01:41 G	21656894.41	21656894.57	21656894.76	0.0063	0.0037
Venus	54583-01-29 05:31 G	21657119.51	21657119.73	21657119.95	0.0063	0.0001
Venus	54583-09-11 09:07 G	21657344.71	21657344.88	21657345.07	0.0063	0.0036
Earth	54592-01-08 10:34 G	21660385.70	21660385.94	21660386.19	0.0066	0.0021
Moon	54592-01-08 13:12 G	21660385.81	21660386.05	21660386.32	0.0066	0.0018 *
Mercury	54593-12-19 13:55 G	21661097.04	21661097.08	21661097.13	0.0067	0.0064
Mercury	54594-03-17 14:10 G	21661185.03	21661185.09	21661185.19	0.0067	0.0054
Mercury	54594-06-13 14:53 G	21661273.03	21661273.12	21661273.24	0.0067	0.0043
Mercury	54594-09-09 15:36 G	21661361.04	21661361.15	21661361.28	0.0068	0.0032
Mercury	54594-12-06 16:19 G	21661449.05	21661449.18	21661449.32	0.0068	0.0021
Mercury	54595-03-04 17:02 G	21661537.07	21661537.21	21661537.35	0.0068	0.0010
Mercury	54595-05-31 17:31 G	21661625.09	21661625.23	21661625.37	0.0068	0.0002
Mercury	54595-08-27 18:14 G	21661713.12	21661713.26	21661713.39	0.0068	0.0012
Mercury	54595-11-23 18:43 G	21661801.15	21661801.28	21661801.41	0.0068	0.0023

Mercury	54596-02-19 19:12 G	21661889.19	21661889.30	21661889.43	0.0068	0.0035
Mercury	54596-05-17 19:55 G	21661977.23	21661977.33	21661977.44	0.0068	0.0046
Mercury	54596-08-13 20:24 G	21662065.28	21662065.35	21662065.43	0.0068	0.0057
Mercury	54596-11-09 21:07 G	21662153.37	21662153.38	21662153.40	0.0068	0.0068
Venus	54672-08-03 18:43 G	21689813.17	21689813.28	21689813.41	0.0082	0.0069
Venus	54673-03-17 06:00 G	21690038.53	21690038.75	21690038.97	0.0081	0.0010
Jupiter	54676-08-18 12:43 G	21691288.51	21691289.03	21691289.61	0.0079	0.0021
Earth	54678-07-12 12:43 G	21691981.88	21691982.03	21691982.23	0.0078	0.0057
Moon	54678-07-12 14:10 G	21691981.93	21691982.09	21691982.31	0.0078	0.0055 *
Mars	54679-07-01 10:34 G	21692335.65	21692335.94	21692336.23	0.0078	0.0027
Mercury	54680-10-09 04:05 G	21692801.60	21692801.67	21692801.77	0.0077	0.0068
Mercury	54681-01-05 06:29 G	21692889.64	21692889.77	21692889.93	0.0077	0.0047
Mercury	54681-04-03 08:53 G	21692977.70	21692977.87	21692978.05	0.0077	0.0026
Mercury	54681-06-30 11:17 G	21693065.79	21693065.97	21693066.15	0.0077	0.0004
Mercury	54681-09-26 13:26 G	21693153.88	21693154.06	21693154.24	0.0077	0.0017
Mercury	54681-12-23 15:36 G	21693242.00	21693242.15	21693242.32	0.0076	0.0038
Mercury	54682-03-21 17:46 G	21693330.13	21693330.24	21693330.37	0.0076	0.0058
Venus	54827-12-06 10:48 G	21746549.86	21746549.95	21746550.06	0.0063	0.0056
Venus	54828-07-18 14:24 G	21746774.90	21746775.10	21746775.32	0.0063	0.0021
Venus	54829-02-28 18:00 G	21747000.05	21747000.25	21747000.48	0.0063	0.0016
Venus	54829-10-11 21:50 G	21747225.30	21747225.41	21747225.55	0.0064	0.0053
Earth	54837-01-10 04:05 G	21749872.56	21749872.67	21749872.86	0.0066	0.0054
Moon	54837-01-10 06:14 G	21749872.61	21749872.76	21749872.94	0.0066	0.0050 *
Moon	54838-01-11 15:07 G	21750238.96	21750239.13	21750239.36	0.0066	0.0044
Earth	54838-01-11 18:00 G	21750239.09	21750239.25	21750239.46	0.0066	0.0047 *
Mars	54838-07-14 21:22 G	21750423.10	21750423.39	21750423.68	0.0067	0.0029
Mercury	54839-08-21 05:02 G	21750825.69	21750825.71	21750825.75	0.0067	0.0065
Mercury	54839-11-17 05:46 G	21750913.67	21750913.74	21750913.83	0.0067	0.0054
Mercury	54840-02-13 06:29 G	21751001.67	21751001.77	21751001.88	0.0067	0.0044
Mercury	54840-05-11 06:43 G	21751089.67	21751089.78	21751089.92	0.0067	0.0034

Mercury	54840-08-07 07:26 G	21751177.69	21751177.81	21751177.95	0.0068	0.0023
Mercury	54840-11-03 08:10 G	21751265.71	21751265.84	21751265.98	0.0068	0.0011
Mercury	54841-01-30 08:53 G	21751353.73	21751353.87	21751354.01	0.0068	0.0000
Mercury	54841-04-28 09:22 G	21751441.76	21751441.89	21751442.03	0.0068	0.0011
Mercury	54841-07-25 09:50 G	21751529.79	21751529.91	21751530.05	0.0068	0.0022
Mercury	54841-10-21 10:19 G	21751617.82	21751617.93	21751618.06	0.0068	0.0033
Mercury	54842-01-17 11:02 G	21751705.86	21751705.96	21751706.07	0.0068	0.0044
Mercury	54842-04-15 11:31 G	21751793.91	21751793.98	21751794.07	0.0068	0.0055
Mercury	54842-07-12 12:14 G	21751881.99	21751882.01	21751882.05	0.0068	0.0066
Venus	54918-09-04 10:19 G	21779693.75	21779693.93	21779694.15	0.0081	0.0034
Venus	54919-04-17 21:22 G	21779919.22	21779919.39	21779919.59	0.0081	0.0044
Moon	54924-07-15 19:26 G	21781835.06	21781835.31	21781835.58	0.0078	0.0015
Earth	54924-07-15 22:48 G	21781835.22	21781835.45	21781835.72	0.0078	0.0020 *
Mars	54925-11-24 22:34 G	21782332.23	21782332.44	21782332.65	0.0077	0.0057
Mercury	54926-06-10 17:02 G	21782530.18	21782530.21	21782530.27	0.0077	0.0074
Mercury	54926-09-06 19:12 G	21782618.19	21782618.30	21782618.45	0.0077	0.0053
Mercury	54926-12-03 21:36 G	21782706.24	21782706.40	21782706.58	0.0077	0.0032
Mercury	54927-03-02 00:00 G	21782794.32	21782794.50	21782794.69	0.0077	0.0011
Mercury	54927-05-29 02:24 G	21782882.42	21782882.60	21782882.78	0.0077	0.0011
Mercury	54927-08-25 04:34 G	21782970.53	21782970.69	21782970.86	0.0076	0.0032
Mercury	54927-11-21 06:43 G	21783058.65	21783058.78	21783058.92	0.0076	0.0053
Mercury	54928-02-17 08:38 G	21783146.83	21783146.86	21783146.93	0.0076	0.0074

# 56TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 56th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	55074-01-05 23:46	G	21836430.33	21836430.49	21836430.69	0.0063	0.0037	
Venus	55074-08-19 03:50	G	21836655.44	21836655.66	21836655.88	0.0063	0.0001	
Venus	55075-04-01 07:12	G	21836880.64	21836880.80	21836881.00	0.0063	0.0036	
Earth	55083-01-14 14:10	G	21839725.85	21839726.09	21839726.34	0.0066	0.0022	
Moon	55083-01-14 17:02	G	21839725.97	21839726.21	21839726.47	0.0066	0.0019	*
Mars	55084-12-07 19:12	G	21840419.03	21840419.30	21840419.62	0.0067	0.0029	
Mercury	55085-04-21 20:38	G	21840554.33	21840554.36	21840554.40	0.0067	0.0065	
Mercury	55085-07-18 20:53	G	21840642.31	21840642.37	21840642.47	0.0067	0.0055	
Mercury	55085-10-14 21:36	G	21840730.31	21840730.40	21840730.52	0.0067	0.0044	
Mercury	55086-01-10 22:19	G	21840818.32	21840818.43	21840818.56	0.0067	0.0033	
Mercury	55086-04-08 23:02	G	21840906.33	21840906.46	21840906.60	0.0068	0.0021	
Mercury	55086-07-05 23:46	G	21840994.35	21840994.49	21840994.63	0.0068	0.0010	
Mercury	55086-10-02 00:29	G	21841082.38	21841082.52	21841082.65	0.0068	0.0002	
Mercury	55086-12-29 00:58	G	21841170.40	21841170.54	21841170.68	0.0068	0.0011	
Mercury	55087-03-27 01:26	G	21841258.44	21841258.56	21841258.70	0.0068	0.0023	
Mercury	55087-06-23 01:55	G	21841346.47	21841346.58	21841346.71	0.0068	0.0034	
Mercury	55087-09-19 02:24	G	21841434.51	21841434.60	21841434.72	0.0068	0.0046	
Mercury	55087-12-16 03:07	G	21841522.57	21841522.63	21841522.72	0.0068	0.0056	
Mercury	55088-03-13 03:50	G	21841610.65	21841610.66	21841610.69	0.0068	0.0067	
Venus	55164-02-22 18:00	G	21869349.13	21869349.25	21869349.38	0.0081	0.0067	
Venus	55164-10-05 05:02	G	21869574.49	21869574.71	21869574.93	0.0081	0.0011	
Moon	55170-07-20 12:14	G	21871688.80	21871689.01	21871689.24	0.0078	0.0037	
Earth	55170-07-20 12:29	G	21871688.81	21871689.02	21871689.28	0.0078	0.0033	*
Mercury	55172-02-10 06:58	G	21872258.74	21872258.79	21872258.85	0.0077	0.0073	
Mercury	55172-05-08 09:07	G	21872346.76	21872346.88	21872347.03	0.0077	0.0052	
Mercury	55172-08-04 11:31	G	21872434.82	21872434.98	21872435.15	0.0077	0.0031	
Mercury	55172-10-31 13:55	G	21872522.90	21872523.08	21872523.26	0.0077	0.0010	

Mercury	55173-01-27 16:05 G	21872610.99	21872611.17	21872611.35	0.0077	0.0011
Mercury	55173-04-25 18:14 G	21872699.10	21872699.26	21872699.43	0.0076	0.0032
Mercury	55173-07-22 20:10 G	21872787.23	21872787.34	21872787.49	0.0076	0.0054
Mercury	55173-10-18 22:19 G	21872875.41	21872875.43	21872875.49	0.0076	0.0075
Venus	55319-06-26 07:55 G	21926085.77	21926085.83	21926085.93	0.0063	0.0058
Venus	55320-02-06 11:46 G	21926310.79	21926310.99	21926311.21	0.0063	0.0023
Venus	55320-09-18 15:22 G	21926535.94	21926536.14	21926536.37	0.0063	0.0014
Venus	55321-05-01 18:58 G	21926761.18	21926761.29	21926761.45	0.0063	0.0051
Moon	55329-01-17 18:43 G	21929579.02	21929579.28	21929579.54	0.0066	0.0002
Earth	55329-01-17 21:36 G	21929579.14	21929579.40	21929579.66	0.0066	0.0001 *
Mercury	55331-03-20 12:00 G	21930370.94	21930371.00	21930371.09	0.0067	0.0057
Mercury	55331-06-16 12:43 G	21930458.94	21930459.03	21930459.14	0.0067	0.0046
Mercury	55331-09-12 13:26 G	21930546.95	21930547.06	21930547.19	0.0067	0.0035
Mercury	55331-12-09 14:10 G	21930634.96	21930635.09	21930635.22	0.0067	0.0024
Mercury	55332-03-06 14:38 G	21930722.98	21930723.11	21930723.25	0.0068	0.0014
Mercury	55332-06-02 15:22 G	21930811.00	21930811.14	21930811.28	0.0068	0.0003
Mercury	55332-08-29 15:50 G	21930899.03	21930899.16	21930899.30	0.0068	0.0009
Mercury	55332-11-25 16:19 G	21930987.06	21930987.18	21930987.33	0.0068	0.0020
Mercury	55333-02-21 17:17 G	21931075.09	21931075.22	21931075.34	0.0068	0.0030
Mercury	55333-05-20 17:31 G	21931163.13	21931163.23	21931163.35	0.0068	0.0042
Mercury	55333-08-16 18:00 G	21931251.18	21931251.25	21931251.36	0.0068	0.0053
Mercury	55333-11-12 18:43 G	21931339.25	21931339.28	21931339.34	0.0068	0.0064
Venus	55410-03-25 08:38 G	21959229.67	21959229.86	21959230.06	0.0081	0.0037
Venus	55410-11-05 19:12 G	21959455.13	21959455.30	21959455.51	0.0081	0.0041
Earth	55416-07-23 21:07 G	21961542.27	21961542.38	21961542.54	0.0078	0.0066
Moon	55416-07-24 00:58 G	21961542.45	21961542.54	21961542.67	0.0078	0.0070 *
Mercury	55418-01-07 21:36 G	21962075.30	21962075.40	21962075.52	0.0077	0.0061
Mercury	55418-04-05 23:46 G	21962163.35	21962163.49	21962163.66	0.0077	0.0040
Mercury	55418-07-03 02:10 G	21962251.42	21962251.59	21962251.78	0.0077	0.0019
Mercury	55418-09-29 04:34 G	21962339.51	21962339.69	21962339.87	0.0077	0.0003



Mercury	55418-12-26 06:43 G	21962427.61	21962427.78	21962427.96	0.0077	0.0024
Mercury	55419-03-24 08:38 G	21962515.73	21962515.86	21962516.02	0.0076	0.0045
Mercury	55419-06-20 10:48 G	21962603.88	21962603.95	21962604.06	0.0076	0.0066
Venus	55565-07-26 20:24 G	22015966.20	22015966.35	22015966.52	0.0063	0.0043
Venus	55566-03-09 00:14 G	22016191.29	22016191.51	22016191.73	0.0063	0.0008
Venus	55566-10-20 03:50 G	22016416.47	22016416.66	22016416.87	0.0063	0.0029
Moon	55575-01-22 02:53 G	22019432.40	22019432.62	22019432.86	0.0066	0.0026
Earth	55575-01-22 04:34 G	22019432.46	22019432.69	22019432.94	0.0066	0.0025 *
Mercury	55576-11-19 03:22 G	22020099.58	22020099.64	22020099.71	0.0067	0.0059
Mercury	55577-02-15 03:50 G	22020187.58	22020187.66	22020187.77	0.0067	0.0049
Mercury	55577-05-14 04:34 G	22020275.58	22020275.69	22020275.81	0.0067	0.0038
Mercury	55577-08-10 05:17 G	22020363.59	22020363.72	22020363.85	0.0067	0.0027
Mercury	55577-11-06 06:00 G	22020451.61	22020451.75	22020451.88	0.0068	0.0016
Mercury	55578-02-02 06:29 G	22020539.63	22020539.77	22020539.91	0.0068	0.0005
Mercury	55578-05-01 07:12 G	22020627.66	22020627.80	22020627.94	0.0068	0.0006
Mercury	55578-07-28 07:41 G	22020715.69	22020715.82	22020715.96	0.0068	0.0017
Mercury	55578-10-24 08:10 G	22020803.72	22020803.84	22020803.97	0.0068	0.0028
Mercury	55579-01-20 08:53 G	22020891.76	22020891.87	22020891.99	0.0068	0.0039
Mercury	55579-04-18 09:22 G	22020979.81	22020979.89	22020979.99	0.0068	0.0051
Mercury	55579-07-15 10:05 G	22021067.87	22021067.92	22021067.98	0.0068	0.0062
Venus	55655-09-11 13:41 G	22048885.03	22048885.07	22048885.13	0.0082	0.0079
Venus	55656-04-24 00:58 G	22049110.32	22049110.54	22049110.76	0.0081	0.0001
Venus	55656-12-05 11:02 G	22049335.92	22049335.96	22049336.07	0.0081	0.0076
Moon	55661-07-25 04:19 G	22051028.55	22051028.68	22051028.85	0.0078	0.0063
Earth	55661-07-25 05:46 G	22051028.58	22051028.74	22051028.92	0.0078	0.0059 *
Mars	55663-03-17 10:19 G	22051628.66	22051628.93	22051629.22	0.0077	0.0034
Mercury	55663-09-08 10:34 G	22051803.87	22051803.94	22051804.05	0.0077	0.0066
Mercury	55663-12-05 13:12 G	22051891.90	22051892.05	22051892.20	0.0077	0.0044
Mercury	55664-03-02 15:22 G	22051979.97	22051980.14	22051980.32	0.0077	0.0023
Mercury	55664-05-29 17:46 G	22052068.05	22052068.24	22052068.42	0.0077	0.0002

Mercury	55664-08-25 19:55 G	22052156.15	22052156.33	22052156.51	0.0077	0.0019
Mercury	55664-11-21 22:05 G	22052244.27	22052244.42	22052244.58	0.0077	0.0040
Mercury	55665-02-18 00:14 G	22052332.41	22052332.51	22052332.62	0.0076	0.0061
Venus	55811-08-27 06:58 G	22105846.62	22105846.79	22105846.99	0.0063	0.0033
Venus	55812-04-08 10:48 G	22106071.74	22106071.95	22106072.18	0.0063	0.0004
Venus	55812-11-19 14:24 G	22106296.95	22106297.10	22106297.29	0.0063	0.0040
Moon	55820-01-24 17:02 G	22108919.14	22108919.21	22108919.36	0.0066	0.0060
Earth	55820-01-24 19:26 G	22108919.22	22108919.31	22108919.45	0.0066	0.0059 *
Earth	55821-01-25 08:53 G	22109285.69	22109285.87	22109286.10	0.0066	0.0041
Moon	55821-01-25 12:14 G	22109285.83	22109286.01	22109286.24	0.0066	0.0041 *
Mercury	55822-07-21 18:00 G	22109828.23	22109828.25	22109828.29	0.0067	0.0065
Mercury	55822-10-17 18:43 G	22109916.20	22109916.28	22109916.36	0.0067	0.0054
Mercury	55823-01-13 19:26 G	22110004.20	22110004.31	22110004.41	0.0067	0.0044
Mercury	55823-04-11 19:41 G	22110092.21	22110092.32	22110092.45	0.0067	0.0033
Mercury	55823-07-08 20:24 G	22110180.23	22110180.35	22110180.49	0.0067	0.0022
Mercury	55823-10-04 21:07 G	22110268.25	22110268.38	22110268.52	0.0067	0.0011
Mercury	55823-12-31 21:50 G	22110356.27	22110356.41	22110356.55	0.0068	0.0001
Mercury	55824-03-28 22:19 G	22110444.30	22110444.43	22110444.57	0.0068	0.0011
Mercury	55824-06-24 23:02 G	22110532.33	22110532.46	22110532.59	0.0068	0.0022
Mercury	55824-09-20 23:31 G	22110620.36	22110620.48	22110620.61	0.0068	0.0033
Mercury	55824-12-18 00:00 G	22110708.41	22110708.50	22110708.62	0.0068	0.0044
Mercury	55825-03-16 00:43 G	22110796.46	22110796.53	22110796.62	0.0068	0.0055
Mercury	55825-06-12 01:26 G	22110884.54	22110884.56	22110884.59	0.0068	0.0067
Venus	55901-10-13 02:38 G	22138765.46	22138765.61	22138765.76	0.0081	0.0059
Venus	55902-05-26 13:41 G	22138990.86	22138991.07	22138991.29	0.0081	0.0018
Earth	55907-07-30 10:34 G	22140881.74	22140881.94	22140882.19	0.0078	0.0039
Moon	55907-07-30 14:38 G	22140881.89	22140882.11	22140882.33	0.0078	0.0041 *
Mercury	55909-08-07 00:29 G	22141620.42	22141620.52	22141620.64	0.0077	0.0061
Mars	55909-08-11 12:43 G	22141624.75	22141625.03	22141625.32	0.0077	0.0031
Mercury	55909-11-03 02:38 G	22141708.47	22141708.61	22141708.78	0.0077	0.0039

Mercury	55910-01-30 05:02 G	22141796.54	22141796.71	22141796.89	0.0077	0.0018
Mercury	55910-04-28 07:26 G	22141884.63	22141884.81	22141884.99	0.0077	0.0003
Mercury	55910-07-25 09:22 G	22141972.73	22141972.89	22141973.07	0.0077	0.0025
Mercury	55910-10-21 11:31 G	22142060.85	22142060.98	22142061.14	0.0077	0.0046
Mercury	55911-01-17 13:41 G	22142149.00	22142149.07	22142149.18	0.0076	0.0066

# 57TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 57th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	56057-02-12 13:55 G		22195502.01	22195502.08	22195502.18	0.0063	0.0058	
Venus	56057-09-25 17:31 G		22195727.04	22195727.23	22195727.46	0.0063	0.0023	
Venus	56058-05-08 21:36 G		22195952.19	22195952.40	22195952.62	0.0063	0.0013	
Venus	56058-12-20 01:12 G		22196177.43	22196177.55	22196177.71	0.0064	0.0050	
Moon	56066-01-26 22:19 G		22198772.26	22198772.43	22198772.64	0.0066	0.0042	
Earth	56066-01-27 00:58 G		22198772.35	22198772.54	22198772.75	0.0066	0.0042	*
Earth	56067-01-28 13:55 G		22199138.98	22199139.08	22199139.23	0.0066	0.0058	
Moon	56067-01-28 14:53 G		22199138.98	22199139.12	22199139.27	0.0066	0.0056	*
Mercury	56068-06-17 09:07 G		22199644.83	22199644.88	22199644.95	0.0067	0.0060	
Mars	56068-08-21 07:55 G		22199709.57	22199709.83	22199710.15	0.0067	0.0031	
Mercury	56068-09-13 09:50 G		22199732.83	22199732.91	22199733.01	0.0067	0.0049	
Mercury	56068-12-10 10:34 G		22199820.83	22199820.94	22199821.06	0.0067	0.0039	
Mercury	56069-03-08 11:17 G		22199908.84	22199908.97	22199909.10	0.0067	0.0028	

Mercury	56069-06-04 11:46 G	22199996.86	22199996.99	22199997.13	0.0067	0.0017
Mercury	56069-08-31 12:29 G	22200084.88	22200085.02	22200085.16	0.0068	0.0006
Mercury	56069-11-27 12:58 G	22200172.91	22200173.04	22200173.19	0.0068	0.0006
Mercury	56070-02-23 13:41 G	22200260.94	22200261.07	22200261.21	0.0068	0.0016
Mercury	56070-05-22 14:24 G	22200348.97	22200349.10	22200349.22	0.0068	0.0027
Mercury	56070-08-18 14:53 G	22200437.01	22200437.12	22200437.24	0.0068	0.0038
Mercury	56070-11-14 15:36 G	22200525.05	22200525.15	22200525.24	0.0068	0.0049
Mercury	56071-02-10 15:50 G	22200613.11	22200613.16	22200613.24	0.0068	0.0061
Venus	56147-11-12 16:19 G	22228645.99	22228646.18	22228646.39	0.0081	0.0033
Venus	56148-06-25 03:22 G	22228871.46	22228871.64	22228871.83	0.0081	0.0043
Moon	56153-08-01 18:00 G	22230734.99	22230735.25	22230735.52	0.0078	0.0010
Earth	56153-08-01 18:14 G	22230735.01	22230735.26	22230735.53	0.0078	0.0010 *
Mercury	56155-04-07 12:29 G	22231348.97	22231349.02	22231349.09	0.0077	0.0072
Mercury	56155-07-04 14:38 G	22231436.99	22231437.11	22231437.26	0.0077	0.0051
Mercury	56155-09-30 16:48 G	22231525.05	22231525.20	22231525.38	0.0077	0.0030
Mercury	56155-12-27 19:12 G	22231613.13	22231613.30	22231613.49	0.0077	0.0009
Mercury	56156-03-24 21:36 G	22231701.22	22231701.40	22231701.58	0.0077	0.0013
Mercury	56156-06-20 23:31 G	22231789.33	22231789.48	22231789.66	0.0077	0.0034
Mercury	56156-09-17 01:41 G	22231877.46	22231877.57	22231877.71	0.0076	0.0055
Mercury	56156-12-14 03:50 G	22231965.65	22231965.66	22231965.70	0.0076	0.0075
Venus	56303-03-17 00:00 G	22285382.38	22285382.50	22285382.63	0.0063	0.0051
Venus	56303-10-28 03:36 G	22285607.44	22285607.65	22285607.87	0.0063	0.0016
Venus	56304-06-09 07:12 G	22285832.60	22285832.80	22285833.02	0.0063	0.0020
Venus	56305-01-20 10:34 G	22286057.87	22286057.94	22286058.07	0.0064	0.0057
Earth	56312-02-01 03:36 G	22288625.44	22288625.65	22288625.89	0.0066	0.0032
Moon	56312-02-01 06:29 G	22288625.57	22288625.77	22288626.02	0.0066	0.0031 *
Moon	56313-02-01 13:12 G	22288992.03	22288992.05	22288992.12	0.0066	0.0066
Mercury	56314-05-17 00:00 G	22289461.45	22289461.50	22289461.58	0.0067	0.0058
Mercury	56314-08-13 00:43 G	22289549.44	22289549.53	22289549.64	0.0067	0.0047
Mercury	56314-11-09 01:26 G	22289637.45	22289637.56	22289637.68	0.0067	0.0036

Mars	56315-01-15 16:48 G	22289704.88	22289705.20	22289705.53	0.0067	0.0005
Mercury	56315-02-05 02:10 G	22289725.46	22289725.59	22289725.72	0.0067	0.0026
Mercury	56315-05-04 02:38 G	22289813.48	22289813.61	22289813.75	0.0067	0.0015
Mercury	56315-07-31 03:22 G	22289901.50	22289901.64	22289901.78	0.0067	0.0004
Mercury	56315-10-27 03:50 G	22289989.53	22289989.66	22289989.80	0.0068	0.0007
Mercury	56316-01-23 04:34 G	22290077.56	22290077.69	22290077.82	0.0068	0.0018
Mercury	56316-04-20 04:48 G	22290165.59	22290165.70	22290165.84	0.0068	0.0030
Mercury	56316-07-17 05:46 G	22290253.63	22290253.74	22290253.85	0.0068	0.0040
Mercury	56316-10-13 06:00 G	22290341.68	22290341.75	22290341.86	0.0068	0.0052
Mercury	56317-01-09 06:43 G	22290429.74	22290429.78	22290429.84	0.0068	0.0063
Venus	56393-12-13 02:53 G	22318526.42	22318526.62	22318526.84	0.0081	0.0022
Venus	56394-07-26 13:41 G	22318751.92	22318752.07	22318752.24	0.0081	0.0054
Moon	56399-08-05 18:00 G	22320587.99	22320588.25	22320588.50	0.0078	0.0002
Earth	56399-08-05 21:07 G	22320588.12	22320588.38	22320588.64	0.0078	0.0002 *
Mercury	56401-03-05 01:26 G	22321165.52	22321165.56	22321165.64	0.0077	0.0072
Mercury	56401-06-01 03:36 G	22321253.53	22321253.65	22321253.81	0.0077	0.0051
Mercury	56401-08-28 06:14 G	22321341.60	22321341.76	22321341.93	0.0077	0.0029
Mercury	56401-11-24 08:24 G	22321429.67	22321429.85	22321430.04	0.0077	0.0009
Mercury	56402-02-20 10:34 G	22321517.77	22321517.94	22321518.13	0.0077	0.0013
Mercury	56402-05-19 12:43 G	22321605.87	22321606.03	22321606.20	0.0077	0.0034
Mercury	56402-08-15 14:53 G	22321694.00	22321694.12	22321694.26	0.0077	0.0055
Mercury	56402-11-11 16:48 G	22321782.20	22321782.20	22321782.25	0.0076	0.0076
Venus	56549-04-15 09:07 G	22375262.75	22375262.88	22375263.04	0.0063	0.0046
Venus	56549-11-26 13:12 G	22375487.83	22375488.05	22375488.27	0.0063	0.0011
Venus	56550-07-09 16:34 G	22375713.00	22375713.19	22375713.41	0.0063	0.0026
Venus	56551-02-19 20:10 G	22375938.31	22375938.34	22375938.41	0.0064	0.0062
Earth	56558-02-03 06:29 G	22378478.53	22378478.77	22378479.02	0.0066	0.0023
Moon	56558-02-03 06:43 G	22378478.55	22378478.78	22378479.06	0.0066	0.0021 *
Mercury	56560-01-15 14:24 G	22379190.10	22379190.10	22379190.12	0.0067	0.0067
Mercury	56560-04-12 14:53 G	22379278.06	22379278.12	22379278.21	0.0067	0.0056

Mercury	56560-07-09 15:36 G	22379366.06	22379366.15	22379366.26	0.0067	0.0045
Mercury	56560-10-05 16:19 G	22379454.07	22379454.18	22379454.31	0.0067	0.0035
Mercury	56561-01-01 17:02 G	22379542.08	22379542.21	22379542.34	0.0067	0.0024
Mercury	56561-03-30 17:46 G	22379630.10	22379630.24	22379630.37	0.0067	0.0013
Mars	56561-06-09 01:41 G	22379700.34	22379700.57	22379700.87	0.0067	0.0040
Mercury	56561-06-26 18:14 G	22379718.12	22379718.26	22379718.40	0.0067	0.0002
Mercury	56561-09-22 18:43 G	22379806.15	22379806.28	22379806.43	0.0068	0.0010
Mercury	56561-12-19 19:12 G	22379894.18	22379894.30	22379894.45	0.0068	0.0021
Mercury	56562-03-17 19:55 G	22379982.21	22379982.33	22379982.46	0.0068	0.0032
Mercury	56562-06-13 20:24 G	22380070.26	22380070.35	22380070.47	0.0068	0.0043
Mercury	56562-09-09 21:07 G	22380158.31	22380158.38	22380158.47	0.0068	0.0054
Mercury	56562-12-06 21:36 G	22380246.38	22380246.40	22380246.45	0.0068	0.0065
Venus	56640-01-13 14:53 G	22408406.91	22408407.12	22408407.35	0.0081	0.0006
Venus	56640-08-26 01:12 G	22408632.47	22408632.55	22408632.69	0.0081	0.0070
Earth	56645-08-09 00:58 G	22410441.29	22410441.54	22410441.80	0.0078	0.0019
Moon	56645-08-09 02:53 G	22410441.39	22410441.62	22410441.88	0.0078	0.0021 *
Mercury	56647-01-31 15:22 G	22410982.06	22410982.14	22410982.22	0.0077	0.0069
Mercury	56647-04-29 17:17 G	22411070.09	22411070.22	22411070.38	0.0077	0.0048
Mercury	56647-07-26 19:41 G	22411158.15	22411158.32	22411158.50	0.0077	0.0026
Mercury	56647-10-22 22:05 G	22411246.23	22411246.42	22411246.60	0.0077	0.0005
Mercury	56648-01-19 00:14 G	22411334.33	22411334.51	22411334.69	0.0077	0.0016
Mercury	56648-04-16 02:24 G	22411422.44	22411422.60	22411422.76	0.0077	0.0037
Mercury	56648-07-13 04:34 G	22411510.57	22411510.69	22411510.81	0.0077	0.0058
Venus	56795-05-16 17:31 G	22465143.09	22465143.23	22465143.40	0.0063	0.0044
Venus	56795-12-27 21:36 G	22465368.18	22465368.40	22465368.62	0.0063	0.0009
Venus	56796-08-09 00:58 G	22465593.36	22465593.54	22465593.76	0.0063	0.0028
Venus	56797-03-22 05:02 G	22465818.71	22465818.71	22465818.72	0.0064	0.0064
Moon	56804-02-07 03:22 G	22468331.40	22468331.64	22468331.90	0.0066	0.0016
Earth	56804-02-07 06:58 G	22468331.55	22468331.79	22468332.04	0.0066	0.0019 *
Mercury	56806-03-11 05:31 G	22469094.67	22469094.73	22469094.81	0.0067	0.0057

Mercury	56806-06-07 06:14 G	22469182.66	22469182.76	22469182.86	0.0067	0.0046
Mercury	56806-09-03 06:43 G	22469270.67	22469270.78	22469270.91	0.0067	0.0036
Mercury	56806-11-30 07:12 G	22469358.68	22469358.80	22469358.94	0.0067	0.0026
Mercury	56807-02-26 07:55 G	22469446.70	22469446.83	22469446.98	0.0067	0.0015
Mercury	56807-05-25 08:38 G	22469534.72	22469534.86	22469535.00	0.0067	0.0004
Mercury	56807-08-21 09:22 G	22469622.75	22469622.89	22469623.03	0.0068	0.0008
Mars	56807-11-02 06:58 G	22469695.77	22469695.79	22469695.88	0.0068	0.0067
Mercury	56807-11-17 10:05 G	22469710.78	22469710.92	22469711.05	0.0068	0.0019
Mercury	56808-02-13 10:34 G	22469798.82	22469798.94	22469799.07	0.0068	0.0030
Mercury	56808-05-11 11:17 G	22469886.86	22469886.97	22469887.08	0.0068	0.0041
Mercury	56808-08-07 11:46 G	22469974.91	22469974.99	22469975.08	0.0068	0.0052
Mercury	56808-11-03 12:00 G	22470062.97	22470063.00	22470063.07	0.0068	0.0064
Venus	56885-07-01 12:29 G	22498062.00	22498062.02	22498062.04	0.0081	0.0081
Venus	56886-02-11 23:31 G	22498287.26	22498287.48	22498287.70	0.0081	0.0004
Venus	56886-09-25 10:05 G	22498512.83	22498512.92	22498513.03	0.0081	0.0071
Earth	56891-08-11 23:31 G	22500294.24	22500294.48	22500294.75	0.0078	0.0017
Moon	56891-08-12 01:41 G	22500294.32	22500294.57	22500294.84	0.0078	0.0021 *
Mercury	56892-12-28 03:07 G	22500798.60	22500798.63	22500798.68	0.0077	0.0076
Mercury	56893-03-26 05:17 G	22500886.60	22500886.72	22500886.86	0.0077	0.0054
Mercury	56893-06-22 07:26 G	22500974.66	22500974.81	22500974.99	0.0077	0.0033
Mercury	56893-09-18 09:50 G	22501062.74	22501062.91	22501063.09	0.0077	0.0012
Mercury	56893-12-15 12:00 G	22501150.83	22501151.00	22501151.19	0.0077	0.0010
Mercury	56894-03-13 14:10 G	22501238.93	22501239.09	22501239.26	0.0077	0.0031
Mercury	56894-06-09 16:05 G	22501327.06	22501327.17	22501327.32	0.0077	0.0052
Mercury	56894-09-05 18:14 G	22501415.22	22501415.26	22501415.34	0.0076	0.0073

# 58TH MILLENNIUM CE

**This is a list of transits visible from Pluto in the 58th millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	57041-06-16 00:29	G	22555023.40	22555023.52	22555023.70	0.0063	0.0046	
Venus	57042-01-27 04:48	G	22555248.48	22555248.70	22555248.92	0.0063	0.0011	
Venus	57042-09-09 08:10	G	22555473.65	22555473.84	22555474.06	0.0063	0.0025	
Venus	57043-04-22 11:46	G	22555698.96	22555698.99	22555699.07	0.0064	0.0062	
Earth	57050-02-10 05:17	G	22558184.49	22558184.72	22558184.98	0.0066	0.0022	
Moon	57050-02-10 06:58	G	22558184.56	22558184.79	22558185.04	0.0066	0.0019	*
Mercury	57052-02-06 19:26	G	22558911.27	22558911.31	22558911.38	0.0067	0.0061	
Mercury	57052-05-04 20:24	G	22558999.26	22558999.35	22558999.44	0.0067	0.0050	
Mercury	57052-07-31 20:38	G	22559087.26	22559087.36	22559087.49	0.0067	0.0040	
Mercury	57052-10-27 21:22	G	22559175.27	22559175.39	22559175.53	0.0067	0.0029	
Mercury	57053-01-23 22:05	G	22559263.29	22559263.42	22559263.56	0.0067	0.0018	
Mercury	57053-04-21 22:48	G	22559351.31	22559351.45	22559351.59	0.0067	0.0007	
Mercury	57053-07-18 23:31	G	22559439.34	22559439.48	22559439.62	0.0067	0.0004	
Mercury	57053-10-15 00:00	G	22559527.37	22559527.50	22559527.64	0.0068	0.0015	
Mercury	57054-01-11 00:29	G	22559615.40	22559615.52	22559615.66	0.0068	0.0026	
Mercury	57054-04-09 00:58	G	22559703.44	22559703.54	22559703.67	0.0068	0.0038	
Mercury	57054-07-06 01:41	G	22559791.49	22559791.57	22559791.68	0.0068	0.0049	
Mercury	57054-10-02 02:10	G	22559879.54	22559879.59	22559879.67	0.0068	0.0060	
Venus	57131-08-02 20:24	G	22587942.32	22587942.35	22587942.41	0.0081	0.0080	
Venus	57132-03-15 07:41	G	22588167.60	22588167.82	22588168.04	0.0081	0.0003	
Venus	57132-10-26 18:14	G	22588393.17	22588393.26	22588393.37	0.0081	0.0072	
Moon	57137-08-15 19:41	G	22590147.07	22590147.32	22590147.58	0.0078	0.0019	



Earth	57137-08-15 23:02 G	22590147.21	22590147.46	22590147.72	0.0078	0.0015	*
Mercury	57139-02-22 17:31 G	22590703.13	22590703.23	22590703.35	0.0077	0.0061	
Mercury	57139-05-21 19:41 G	22590791.17	22590791.32	22590791.48	0.0077	0.0040	
Mercury	57139-08-17 22:05 G	22590879.24	22590879.42	22590879.60	0.0077	0.0018	
Mars	57139-09-19 04:19 G	22590911.47	22590911.68	22590911.91	0.0077	0.0053	
Mercury	57139-11-14 00:14 G	22590967.33	22590967.51	22590967.69	0.0077	0.0003	
Mercury	57140-02-10 02:10 G	22591055.43	22591055.59	22591055.77	0.0077	0.0024	
Mercury	57140-05-08 04:19 G	22591143.54	22591143.68	22591143.84	0.0077	0.0045	
Mercury	57140-08-04 06:29 G	22591231.69	22591231.77	22591231.87	0.0077	0.0066	
Venus	57287-07-16 06:29 G	22644903.66	22644903.77	22644903.90	0.0063	0.0052	
Venus	57288-02-26 10:05 G	22645128.72	22645128.92	22645129.14	0.0063	0.0017	
Venus	57288-10-08 13:55 G	22645353.88	22645354.08	22645354.30	0.0063	0.0019	
Venus	57289-05-21 17:31 G	22645579.14	22645579.23	22645579.36	0.0064	0.0055	
Earth	57296-02-13 01:12 G	22648037.35	22648037.55	22648037.80	0.0066	0.0033	
Moon	57296-02-13 03:50 G	22648037.45	22648037.66	22648037.91	0.0066	0.0031	*
Moon	57297-02-13 13:26 G	22648404.06	22648404.06	22648404.09	0.0066	0.0066	
Mercury	57298-04-01 09:50 G	22648815.85	22648815.91	22648815.99	0.0067	0.0058	
Mercury	57298-06-28 10:34 G	22648903.85	22648903.94	22648904.04	0.0067	0.0047	
Mercury	57298-09-24 11:17 G	22648991.85	22648991.97	22648992.09	0.0067	0.0036	
Mercury	57298-12-21 11:46 G	22649079.87	22649079.99	22649080.13	0.0067	0.0026	
Mercury	57299-03-19 12:29 G	22649167.88	22649168.02	22649168.16	0.0067	0.0015	
Mercury	57299-06-15 12:58 G	22649255.91	22649256.04	22649256.19	0.0067	0.0005	
Mercury	57299-09-11 13:41 G	22649343.93	22649344.07	22649344.21	0.0067	0.0007	
Mercury	57299-12-08 14:10 G	22649431.96	22649432.09	22649432.23	0.0068	0.0019	
Mercury	57300-03-06 14:38 G	22649520.00	22649520.11	22649520.25	0.0068	0.0030	
Mercury	57300-06-02 15:22 G	22649608.04	22649608.14	22649608.26	0.0068	0.0041	
Mercury	57300-08-29 15:50 G	22649696.09	22649696.16	22649696.26	0.0068	0.0052	
Mercury	57300-11-25 16:34 G	22649784.15	22649784.19	22649784.25	0.0068	0.0063	
Venus	57378-04-14 11:31 G	22678047.77	22678047.98	22678048.20	0.0081	0.0020	
Venus	57378-11-25 22:34 G	22678273.28	22678273.44	22678273.60	0.0081	0.0055	

Earth	57383-08-18 15:36 G	22679999.89	22680000.15	22680000.41	0.0078	0.0011
Moon	57383-08-18 15:50 G	22679999.92	22680000.16	22680000.42	0.0078	0.0008 *
Mercury	57385-04-17 05:46 G	22680607.65	22680607.74	22680607.88	0.0077	0.0059
Mercury	57385-07-14 08:24 G	22680695.69	22680695.85	22680696.01	0.0077	0.0038
Mercury	57385-10-10 10:34 G	22680783.76	22680783.94	22680784.12	0.0077	0.0016
Mercury	57386-01-06 12:43 G	22680871.85	22680872.03	22680872.21	0.0077	0.0005
Mars	57386-02-10 08:10 G	22680906.59	22680906.84	22680907.12	0.0077	0.0039
Mercury	57386-04-04 14:38 G	22680959.95	22680960.11	22680960.29	0.0077	0.0026
Mercury	57386-07-01 16:48 G	22681048.07	22681048.20	22681048.35	0.0077	0.0047
Mercury	57386-09-27 18:58 G	22681136.22	22681136.29	22681136.38	0.0077	0.0068
Venus	57534-03-29 14:24 G	22735008.92	22735009.10	22735009.31	0.0063	0.0029
Venus	57534-11-09 18:29 G	22735234.05	22735234.27	22735234.49	0.0063	0.0006
Venus	57535-06-22 21:36 G	22735459.26	22735459.40	22735459.59	0.0063	0.0043
Moon	57542-02-16 15:07 G	22737890.01	22737890.13	22737890.32	0.0066	0.0053
Earth	57542-02-16 18:43 G	22737890.15	22737890.28	22737890.46	0.0066	0.0052 *
Earth	57543-02-18 08:10 G	22738256.67	22738256.84	22738257.03	0.0066	0.0048
Moon	57543-02-18 11:02 G	22738256.82	22738256.96	22738257.17	0.0066	0.0049 *
Mercury	57544-05-26 23:31 G	22738720.43	22738720.48	22738720.56	0.0067	0.0059
Mercury	57544-08-23 00:00 G	22738808.42	22738808.50	22738808.62	0.0067	0.0048
Mercury	57544-11-19 00:43 G	22738896.43	22738896.53	22738896.66	0.0067	0.0037
Mercury	57545-02-15 01:26 G	22738984.44	22738984.56	22738984.70	0.0067	0.0026
Mercury	57545-05-14 02:10 G	22739072.46	22739072.59	22739072.73	0.0067	0.0015
Mercury	57545-08-10 02:53 G	22739160.48	22739160.62	22739160.76	0.0067	0.0004
Mercury	57545-11-06 03:22 G	22739248.51	22739248.64	22739248.79	0.0067	0.0007
Mercury	57546-02-02 04:05 G	22739336.54	22739336.67	22739336.81	0.0067	0.0018
Mercury	57546-05-01 04:34 G	22739424.57	22739424.69	22739424.82	0.0068	0.0029
Mercury	57546-07-28 05:17 G	22739512.61	22739512.72	22739512.84	0.0068	0.0040
Mercury	57546-10-24 05:46 G	22739600.66	22739600.74	22739600.84	0.0068	0.0051
Mercury	57547-01-20 06:29 G	22739688.72	22739688.77	22739688.83	0.0068	0.0062
Venus	57624-05-14 13:55 G	22767927.91	22767928.08	22767928.28	0.0081	0.0044

Venus	57624-12-26 00:58 G	22768153.35	22768153.54	22768153.75	0.0081	0.0032
Earth	57629-08-21 04:48 G	22769852.51	22769852.70	22769852.94	0.0078	0.0045
Moon	57629-08-21 08:10 G	22769852.64	22769852.84	22769853.08	0.0078	0.0044 *
Mercury	57631-06-11 17:46 G	22770512.15	22770512.24	22770512.36	0.0077	0.0062
Mercury	57631-09-07 19:55 G	22770600.19	22770600.33	22770600.50	0.0077	0.0041
Mercury	57631-12-04 22:19 G	22770688.26	22770688.43	22770688.61	0.0077	0.0019
Mercury	57632-03-02 00:43 G	22770776.35	22770776.53	22770776.71	0.0077	0.0002
Mercury	57632-05-29 02:53 G	22770864.45	22770864.62	22770864.79	0.0077	0.0023
Mars	57632-07-05 09:50 G	22770901.65	22770901.91	22770902.20	0.0077	0.0033
Mercury	57632-08-25 04:34 G	22770952.56	22770952.69	22770952.86	0.0077	0.0045
Mercury	57632-11-21 06:43 G	22771040.71	22771040.78	22771040.89	0.0077	0.0066
Venus	57780-04-27 17:02 G	22824889.08	22824889.21	22824889.39	0.0063	0.0045
Venus	57780-12-08 21:22 G	22825114.18	22825114.39	22825114.62	0.0063	0.0010
Venus	57781-07-22 00:43 G	22825339.35	22825339.53	22825339.75	0.0063	0.0027
Venus	57782-03-04 04:48 G	22825564.66	22825564.70	22825564.75	0.0064	0.0062
Moon	57789-02-19 21:22 G	22828109.15	22828109.39	22828109.65	0.0066	0.0023
Earth	57789-02-19 22:34 G	22828109.21	22828109.44	22828109.70	0.0066	0.0022 *
Mercury	57790-07-20 12:43 G	22828625.00	22828625.03	22828625.09	0.0067	0.0063
Mercury	57790-10-16 13:26 G	22828712.98	22828713.06	22828713.16	0.0067	0.0052
Mercury	57791-01-12 14:10 G	22828800.99	22828801.09	22828801.21	0.0067	0.0041
Mercury	57791-04-10 14:53 G	22828889.00	22828889.12	22828889.25	0.0067	0.0030
Mercury	57791-07-07 15:36 G	22828977.01	22828977.15	22828977.28	0.0067	0.0019
Mercury	57791-10-03 16:19 G	22829065.04	22829065.18	22829065.32	0.0067	0.0009
Mercury	57791-12-30 16:48 G	22829153.06	22829153.20	22829153.34	0.0067	0.0003
Mercury	57792-03-27 17:31 G	22829241.09	22829241.23	22829241.36	0.0067	0.0014
Mercury	57792-06-23 18:00 G	22829329.12	22829329.25	22829329.38	0.0067	0.0025
Mercury	57792-09-19 18:29 G	22829417.16	22829417.27	22829417.40	0.0068	0.0036
Mercury	57792-12-16 19:12 G	22829505.21	22829505.30	22829505.40	0.0068	0.0047
Mercury	57793-03-14 19:55 G	22829593.26	22829593.33	22829593.40	0.0068	0.0058
Venus	57871-01-26 00:14 G	22858033.29	22858033.51	22858033.73	0.0081	0.0007

Venus	57871-09-08 10:48 G	22858258.84	22858258.95	22858259.08	0.0081	0.0068
Earth	57876-08-25 16:05 G	22860072.07	22860072.17	22860072.32	0.0078	0.0068
Moon	57876-08-25 19:12 G	22860072.21	22860072.30	22860072.45	0.0078	0.0069 *
Mercury	57877-08-05 04:05 G	22860416.65	22860416.67	22860416.72	0.0077	0.0076
Mercury	57877-11-01 06:14 G	22860504.65	22860504.76	22860504.90	0.0077	0.0055
Mercury	57878-01-28 08:38 G	22860592.70	22860592.86	22860593.03	0.0077	0.0033
Mercury	57878-04-26 10:48 G	22860680.78	22860680.95	22860681.14	0.0077	0.0012
Mercury	57878-07-23 13:12 G	22860768.87	22860769.05	22860769.23	0.0077	0.0009
Mercury	57878-10-19 14:53 G	22860856.97	22860857.12	22860857.30	0.0077	0.0031
Mars	57878-11-28 00:43 G	22860896.34	22860896.53	22860896.78	0.0077	0.0052
Mercury	57879-01-15 17:02 G	22860945.09	22860945.21	22860945.36	0.0077	0.0052
Mercury	57879-04-13 18:58 G	22861033.26	22861033.29	22861033.37	0.0077	0.0073

# 59TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 59th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	58027-01-08 22:19 G		22914994.25	22914994.43	22914994.64	0.0063	0.0031	
Venus	58027-08-22 02:24 G		22915219.38	22915219.60	22915219.82	0.0063	0.0004	
Venus	58028-04-03 06:00 G		22915444.59	22915444.75	22915444.93	0.0063	0.0040	
Saturn	58034-01-08 19:55 G		22917550.66	22917551.33	22917552.05	0.0066	0.0004	
Moon	58035-02-23 09:07 G		22917961.64	22917961.88	22917962.13	0.0066	0.0011	
Earth	58035-02-23 11:31 G		22917961.73	22917961.98	22917962.23	0.0066	0.0014 *	

Mercury	58036-12-10 02:10 G	22918617.55	22918617.59	22918617.67	0.0067	0.0060
Mercury	58037-03-08 02:53 G	22918705.54	22918705.62	22918705.73	0.0067	0.0049
Mercury	58037-06-04 03:36 G	22918793.54	22918793.65	22918793.77	0.0067	0.0038
Mercury	58037-08-31 04:19 G	22918881.55	22918881.68	22918881.81	0.0067	0.0027
Mercury	58037-11-27 05:02 G	22918969.57	22918969.71	22918969.85	0.0067	0.0016
Mercury	58038-02-23 05:31 G	22919057.59	22919057.73	22919057.88	0.0067	0.0006
Mercury	58038-05-22 06:14 G	22919145.62	22919145.76	22919145.90	0.0067	0.0006
Mercury	58038-08-18 06:58 G	22919233.65	22919233.79	22919233.92	0.0067	0.0017
Mercury	58038-11-14 07:26 G	22919321.69	22919321.81	22919321.94	0.0067	0.0028
Mercury	58039-02-10 08:10 G	22919409.73	22919409.84	22919409.95	0.0068	0.0039
Mercury	58039-05-09 08:38 G	22919497.77	22919497.86	22919497.96	0.0068	0.0050
Mercury	58039-08-05 09:22 G	22919585.84	22919585.89	22919585.95	0.0068	0.0061
Mars	58039-10-26 19:12 G	22919668.19	22919668.30	22919668.45	0.0068	0.0062
Venus	58117-02-24 21:50 G	22947913.24	22947913.41	22947913.58	0.0081	0.0051
Venus	58117-10-08 08:24 G	22948138.66	22948138.85	22948139.08	0.0081	0.0025
Moon	58122-08-28 22:48 G	22949924.19	22949924.45	22949924.73	0.0078	0.0010
Earth	58122-08-28 23:31 G	22949924.22	22949924.48	22949924.74	0.0078	0.0006 *
Mercury	58123-12-26 16:19 G	22950409.12	22950409.18	22950409.26	0.0078	0.0072
Mercury	58124-03-23 18:29 G	22950497.15	22950497.27	22950497.42	0.0077	0.0050
Mercury	58124-06-19 20:38 G	22950585.20	22950585.36	22950585.54	0.0077	0.0029
Mercury	58124-09-15 23:02 G	22950673.28	22950673.46	22950673.64	0.0077	0.0008
Mercury	58124-12-13 01:12 G	22950761.37	22950761.55	22950761.73	0.0077	0.0013
Mercury	58125-03-11 03:22 G	22950849.48	22950849.64	22950849.80	0.0077	0.0034
Mars	58125-04-21 14:38 G	22950891.09	22950891.11	22950891.19	0.0077	0.0076
Mercury	58125-06-07 05:31 G	22950937.60	22950937.73	22950937.85	0.0077	0.0055
Mercury	58125-09-03 07:26 G	22951025.80	22951025.81	22951025.84	0.0077	0.0076
Venus	58273-02-07 22:05 G	23004874.35	23004874.42	23004874.56	0.0063	0.0056
Venus	58273-09-21 02:10 G	23005099.40	23005099.59	23005099.81	0.0063	0.0021
Venus	58274-05-04 06:14 G	23005324.55	23005324.76	23005324.98	0.0063	0.0015
Venus	58274-12-15 09:36 G	23005549.79	23005549.90	23005550.06	0.0063	0.0051

Earth	58281-02-25 22:05 G	23007814.29	23007814.42	23007814.57	0.0066	0.0055
Moon	58281-02-26 01:12 G	23007814.41	23007814.55	23007814.72	0.0066	0.0052 *
Moon	58282-02-27 07:12 G	23008180.62	23008180.80	23008181.03	0.0066	0.0042
Earth	58282-02-27 11:02 G	23008180.78	23008180.96	23008181.16	0.0066	0.0044 *
Mercury	58283-05-02 15:36 G	23008610.09	23008610.15	23008610.22	0.0067	0.0059
Mercury	58283-07-29 15:50 G	23008698.08	23008698.16	23008698.28	0.0067	0.0049
Mercury	58283-10-25 16:34 G	23008786.09	23008786.19	23008786.32	0.0067	0.0038
Mercury	58284-01-21 17:17 G	23008874.10	23008874.22	23008874.36	0.0067	0.0027
Mercury	58284-04-18 18:00 G	23008962.12	23008962.25	23008962.39	0.0067	0.0016
Mercury	58284-07-15 18:43 G	23009050.14	23009050.28	23009050.42	0.0067	0.0005
Mercury	58284-10-11 19:26 G	23009138.17	23009138.31	23009138.45	0.0067	0.0006
Mercury	58285-01-07 19:55 G	23009226.20	23009226.33	23009226.47	0.0067	0.0017
Mercury	58285-04-05 20:38 G	23009314.23	23009314.36	23009314.49	0.0067	0.0028
Mercury	58285-07-02 20:53 G	23009402.27	23009402.37	23009402.50	0.0067	0.0040
Mercury	58285-09-28 21:50 G	23009490.32	23009490.41	23009490.50	0.0068	0.0050
Mercury	58285-12-25 22:05 G	23009578.38	23009578.42	23009578.49	0.0068	0.0062
Mars	58286-03-19 15:36 G	23009661.88	23009662.15	23009662.46	0.0068	0.0031
Venus	58363-11-08 02:53 G	23038018.43	23038018.62	23038018.84	0.0081	0.0032
Venus	58364-06-20 13:55 G	23038243.91	23038244.08	23038244.28	0.0081	0.0043
Moon	58368-08-30 22:19 G	23039776.35	23039776.43	23039776.56	0.0078	0.0072
Earth	58368-08-31 00:58 G	23039776.50	23039776.54	23039776.64	0.0078	0.0076 *
Mercury	58370-05-18 03:22 G	23040401.63	23040401.64	23040401.66	0.0078	0.0077
Mercury	58370-08-14 05:17 G	23040489.61	23040489.72	23040489.86	0.0077	0.0056
Mercury	58370-11-10 07:41 G	23040577.66	23040577.82	23040577.98	0.0077	0.0034
Mercury	58371-02-06 09:50 G	23040665.74	23040665.91	23040666.09	0.0077	0.0013
Mercury	58371-05-05 12:00 G	23040753.82	23040754.00	23040754.18	0.0077	0.0008
Mercury	58371-08-01 13:55 G	23040841.92	23040842.08	23040842.26	0.0077	0.0029
Mercury	58371-10-28 16:05 G	23040930.04	23040930.17	23040930.32	0.0077	0.0050
Mercury	58372-01-24 18:00 G	23041018.20	23041018.25	23041018.33	0.0077	0.0071
Venus	58519-10-21 23:46 G	23094979.40	23094979.49	23094979.63	0.0063	0.0054

Venus	58520-06-03 03:50 G	23095204.46	23095204.66	23095204.88	0.0063	0.0019
Venus	58521-01-14 07:41 G	23095429.61	23095429.82	23095430.04	0.0063	0.0016
Venus	58521-08-27 11:17 G	23095654.86	23095654.97	23095655.11	0.0064	0.0052
Earth	58528-03-01 17:17 G	23098032.97	23098033.22	23098033.48	0.0066	0.0011
Moon	58528-03-01 18:58 G	23098033.05	23098033.29	23098033.54	0.0066	0.0013 *
Mercury	58529-09-22 03:50 G	23098602.64	23098602.66	23098602.70	0.0066	0.0065
Mercury	58529-12-19 04:19 G	23098690.61	23098690.68	23098690.77	0.0067	0.0055
Mercury	58530-03-17 05:02 G	23098778.61	23098778.71	23098778.82	0.0067	0.0044
Mercury	58530-06-13 05:46 G	23098866.62	23098866.74	23098866.87	0.0067	0.0033
Mercury	58530-09-09 06:14 G	23098954.64	23098954.76	23098954.90	0.0067	0.0022
Mercury	58530-12-06 06:58 G	23099042.66	23099042.79	23099042.93	0.0067	0.0011
Mercury	58531-03-04 07:41 G	23099130.68	23099130.82	23099130.96	0.0067	0.0000
Mercury	58531-05-31 08:10 G	23099218.71	23099218.84	23099218.99	0.0067	0.0011
Mercury	58531-08-27 08:38 G	23099306.74	23099306.86	23099307.01	0.0067	0.0023
Mercury	58531-11-23 09:36 G	23099394.78	23099394.90	23099395.02	0.0067	0.0033
Mercury	58532-02-19 09:50 G	23099482.82	23099482.91	23099483.03	0.0067	0.0045
Mercury	58532-05-17 10:19 G	23099570.87	23099570.93	23099571.03	0.0068	0.0056
Mars	58532-08-10 02:10 G	23099655.29	23099655.59	23099655.93	0.0068	0.0020
Mercury	58532-08-13 11:02 G	23099658.95	23099658.96	23099659.00	0.0068	0.0067
Venus	58610-07-21 06:14 G	23128123.56	23128123.76	23128123.98	0.0081	0.0024
Venus	58611-03-03 17:02 G	23128349.05	23128349.21	23128349.39	0.0081	0.0050
Moon	58615-09-04 23:17 G	23129995.21	23129995.47	23129995.73	0.0078	0.0003
Earth	58615-09-05 02:53 G	23129995.36	23129995.62	23129995.88	0.0078	0.0001 *
Mercury	58617-01-03 15:07 G	23130482.07	23130482.13	23130482.23	0.0078	0.0069
Mercury	58617-04-01 17:31 G	23130570.10	23130570.23	23130570.38	0.0077	0.0047
Mercury	58617-06-28 19:41 G	23130658.16	23130658.32	23130658.50	0.0077	0.0026
Mercury	58617-09-24 22:05 G	23130746.24	23130746.42	23130746.60	0.0077	0.0005
Mercury	58617-12-22 00:00 G	23130834.33	23130834.50	23130834.68	0.0077	0.0017
Mercury	58618-03-20 01:55 G	23130922.44	23130922.58	23130922.75	0.0077	0.0038
Mercury	58618-06-16 04:05 G	23131010.57	23131010.67	23131010.80	0.0077	0.0059

Venus	58766-07-04 00:14 G	23185084.43	23185084.51	23185084.62	0.0063	0.0056
Venus	58767-02-14 04:19 G	23185309.47	23185309.68	23185309.89	0.0063	0.0022
Venus	58767-09-27 07:55 G	23185534.62	23185534.83	23185535.05	0.0063	0.0013
Venus	58768-05-09 11:46 G	23185759.85	23185759.99	23185760.13	0.0064	0.0049
Moon	58775-03-06 09:50 G	23188251.68	23188251.91	23188252.15	0.0066	0.0024
Earth	58775-03-06 10:05 G	23188251.69	23188251.92	23188252.16	0.0066	0.0025 *
Mercury	58776-05-10 16:19 G	23188683.15	23188683.18	23188683.23	0.0066	0.0064
Mercury	58776-08-06 17:02 G	23188771.13	23188771.21	23188771.30	0.0067	0.0053
Mercury	58776-11-02 17:31 G	23188859.13	23188859.23	23188859.35	0.0067	0.0043
Mercury	58777-01-29 18:14 G	23188947.14	23188947.26	23188947.39	0.0067	0.0032
Mercury	58777-04-27 18:58 G	23189035.16	23189035.29	23189035.43	0.0067	0.0021
Mercury	58777-07-24 19:41 G	23189123.18	23189123.32	23189123.46	0.0067	0.0010
Mercury	58777-10-20 20:10 G	23189211.20	23189211.34	23189211.49	0.0067	0.0002
Mercury	58778-01-16 20:53 G	23189299.23	23189299.37	23189299.51	0.0067	0.0012
Mercury	58778-04-14 21:22 G	23189387.26	23189387.39	23189387.53	0.0067	0.0023
Mercury	58778-07-11 21:50 G	23189475.30	23189475.41	23189475.54	0.0067	0.0035
Mercury	58778-10-07 22:34 G	23189563.34	23189563.44	23189563.55	0.0067	0.0045
Mercury	58779-01-03 23:02 G	23189651.40	23189651.46	23189651.55	0.0068	0.0057
Mercury	58779-04-02 00:00 G	23189739.50	23189739.50	23189739.50	0.0068	0.0068
Venus	58857-04-01 05:46 G	23218228.54	23218228.74	23218228.94	0.0081	0.0032
Venus	58857-11-12 16:19 G	23218454.00	23218454.18	23218454.38	0.0081	0.0042
Moon	58862-09-07 18:43 G	23220214.10	23220214.28	23220214.48	0.0078	0.0053
Earth	58862-09-07 21:36 G	23220214.22	23220214.40	23220214.60	0.0078	0.0053 *
Mercury	58863-08-22 01:26 G	23220562.51	23220562.56	23220562.65	0.0078	0.0072
Mercury	58863-11-18 03:36 G	23220650.53	23220650.65	23220650.80	0.0077	0.0051
Mercury	58864-02-14 05:46 G	23220738.59	23220738.74	23220738.92	0.0077	0.0030
Mercury	58864-05-12 08:10 G	23220826.67	23220826.84	23220827.02	0.0077	0.0008
Mercury	58864-08-08 10:19 G	23220914.76	23220914.93	23220915.11	0.0077	0.0013
Mercury	58864-11-04 12:29 G	23221002.86	23221003.02	23221003.18	0.0077	0.0034
Mercury	58865-01-31 14:38 G	23221090.99	23221091.11	23221091.23	0.0077	0.0055



Mercury 58865-04-29 16:34 G 23221179.18 23221179.19 23221179.22 0.0077 0.0076

# 60TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 60th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	59013-10-27 00:58	G	23275414.37	23275414.54	23275414.74	0.0063	0.0035	
Venus	59014-06-09 05:02	G	23275639.49	23275639.71	23275639.93	0.0063	0.0001	
Venus	59015-01-20 08:53	G	23275864.69	23275864.87	23275865.05	0.0063	0.0036	
Earth	59021-03-08 07:41	G	23278103.71	23278103.82	23278103.99	0.0066	0.0055	
Moon	59021-03-08 10:48	G	23278103.86	23278103.95	23278104.11	0.0066	0.0058	*
Moon	59022-03-09 19:12	G	23278470.15	23278470.30	23278470.49	0.0066	0.0048	
Earth	59022-03-09 20:38	G	23278470.20	23278470.36	23278470.58	0.0066	0.0045	*
Mercury	59023-03-26 04:19	G	23278851.63	23278851.68	23278851.75	0.0066	0.0060	
Mercury	59023-06-22 05:02	G	23278939.62	23278939.71	23278939.81	0.0067	0.0049	
Mercury	59023-09-18 05:31	G	23279027.63	23279027.73	23279027.86	0.0067	0.0039	
Mercury	59023-12-15 06:14	G	23279115.64	23279115.76	23279115.90	0.0067	0.0028	
Mercury	59024-03-12 06:58	G	23279203.66	23279203.79	23279203.93	0.0067	0.0017	
Mercury	59024-06-08 07:41	G	23279291.68	23279291.82	23279291.96	0.0067	0.0006	
Mercury	59024-09-04 08:10	G	23279379.70	23279379.84	23279379.99	0.0067	0.0006	
Mercury	59024-12-01 08:53	G	23279467.74	23279467.87	23279468.01	0.0067	0.0016	
Mercury	59025-02-27 09:22	G	23279555.77	23279555.89	23279556.03	0.0067	0.0028	
Mercury	59025-05-26 10:05	G	23279643.81	23279643.92	23279644.04	0.0067	0.0038	

Mercury	59025-08-22 10:34 G	23279731.86	23279731.94	23279732.05	0.0067	0.0050
Mercury	59025-11-18 11:17 G	23279819.92	23279819.97	23279820.04	0.0068	0.0061
Venus	59103-12-14 00:58 G	23308333.40	23308333.54	23308333.71	0.0081	0.0056
Venus	59104-07-26 12:14 G	23308558.80	23308559.01	23308559.23	0.0081	0.0018
Mercury	59110-07-07 12:29 G	23310730.94	23310731.02	23310731.14	0.0078	0.0065
Mercury	59110-10-03 15:07 G	23310818.98	23310819.13	23310819.28	0.0077	0.0043
Mercury	59110-12-30 17:17 G	23310907.05	23310907.22	23310907.39	0.0077	0.0022
Mercury	59111-03-28 19:26 G	23310995.13	23310995.31	23310995.49	0.0077	0.0001
Mercury	59111-06-24 21:22 G	23311083.22	23311083.39	23311083.57	0.0077	0.0021
Mercury	59111-09-20 23:17 G	23311171.33	23311171.47	23311171.63	0.0077	0.0042
Mercury	59111-12-18 01:12 G	23311259.47	23311259.55	23311259.68	0.0077	0.0063
Mars	59112-10-12 11:31 G	23311558.70	23311558.98	23311559.29	0.0076	0.0015
Venus	59260-07-07 19:55 G	23365519.24	23365519.33	23365519.49	0.0063	0.0052
Venus	59261-02-18 00:00 G	23365744.30	23365744.50	23365744.73	0.0063	0.0018
Venus	59261-10-01 03:50 G	23365969.46	23365969.66	23365969.89	0.0063	0.0018
Venus	59262-05-14 07:26 G	23366194.72	23366194.81	23366194.95	0.0064	0.0054
Earth	59268-03-10 16:34 G	23368322.02	23368322.19	23368322.40	0.0066	0.0044
Moon	59268-03-10 20:10 G	23368322.17	23368322.34	23368322.57	0.0066	0.0041 *
Moon	59269-03-12 02:53 G	23368688.49	23368688.62	23368688.79	0.0066	0.0053
Earth	59269-03-12 05:17 G	23368688.62	23368688.72	23368688.89	0.0066	0.0056 *
Mercury	59270-02-06 15:50 G	23369020.11	23369020.16	23369020.24	0.0066	0.0060
Mercury	59270-05-05 16:34 G	23369108.10	23369108.19	23369108.30	0.0066	0.0049
Mercury	59270-08-01 17:17 G	23369196.11	23369196.22	23369196.34	0.0067	0.0038
Mercury	59270-10-28 18:00 G	23369284.12	23369284.25	23369284.38	0.0067	0.0027
Mercury	59271-01-24 18:43 G	23369372.14	23369372.28	23369372.42	0.0067	0.0016
Mercury	59271-04-22 19:12 G	23369460.16	23369460.30	23369460.44	0.0067	0.0005
Mercury	59271-07-19 19:55 G	23369548.19	23369548.33	23369548.47	0.0067	0.0006
Mercury	59271-10-15 20:24 G	23369636.22	23369636.35	23369636.49	0.0067	0.0017
Mercury	59272-01-11 21:07 G	23369724.25	23369724.38	23369724.51	0.0067	0.0028
Mercury	59272-04-08 21:50 G	23369812.29	23369812.41	23369812.52	0.0067	0.0039

Mercury	59272-07-05 22:19 G	23369900.34	23369900.43	23369900.53	0.0067	0.0050
Mercury	59272-10-01 23:02 G	23369988.40	23369988.46	23369988.52	0.0067	0.0061
Mars	59273-09-04 18:43 G	23370325.95	23370326.28	23370326.61	0.0068	0.0002
Venus	59351-04-07 03:36 G	23398663.45	23398663.65	23398663.88	0.0081	0.0022
Venus	59351-11-18 14:24 G	23398888.95	23398889.10	23398889.28	0.0081	0.0052
Moon	59355-09-13 13:41 G	23400284.00	23400284.07	23400284.19	0.0079	0.0073
Earth	59355-09-13 15:36 G	23400284.12	23400284.15	23400284.24	0.0079	0.0077 *
Mercury	59357-05-20 22:19 G	23400899.36	23400899.43	23400899.52	0.0078	0.0069
Mercury	59357-08-17 00:29 G	23400987.39	23400987.52	23400987.67	0.0077	0.0048
Mercury	59357-11-13 02:38 G	23401075.45	23401075.61	23401075.78	0.0077	0.0026
Mercury	59358-02-09 04:48 G	23401163.52	23401163.70	23401163.88	0.0077	0.0005
Mercury	59358-05-08 06:43 G	23401251.61	23401251.78	23401251.96	0.0077	0.0016
Mercury	59358-08-04 08:38 G	23401339.72	23401339.86	23401340.03	0.0077	0.0037
Mercury	59358-10-31 10:48 G	23401427.85	23401427.95	23401428.08	0.0077	0.0058
Venus	59507-11-01 16:34 G	23455849.04	23455849.19	23455849.35	0.0063	0.0044
Venus	59508-06-13 20:10 G	23456074.14	23456074.34	23456074.57	0.0063	0.0011
Venus	59509-01-25 00:00 G	23456299.31	23456299.50	23456299.72	0.0063	0.0026
Venus	59509-09-07 03:50 G	23456524.62	23456524.66	23456524.74	0.0064	0.0061
Earth	59515-03-15 20:24 G	23458540.20	23458540.35	23458540.54	0.0066	0.0050
Moon	59515-03-16 00:14 G	23458540.35	23458540.51	23458540.68	0.0066	0.0050 *
Moon	59516-03-16 06:00 G	23458906.60	23458906.75	23458906.94	0.0066	0.0049
Earth	59516-03-16 08:53 G	23458906.74	23458906.87	23458907.08	0.0066	0.0050 *
Mercury	59516-12-23 02:53 G	23459188.62	23459188.62	23459188.62	0.0066	0.0066
Mercury	59517-03-21 03:22 G	23459276.57	23459276.64	23459276.72	0.0066	0.0056
Mercury	59517-06-17 04:05 G	23459364.57	23459364.67	23459364.77	0.0066	0.0045
Mercury	59517-09-13 04:19 G	23459452.57	23459452.68	23459452.82	0.0067	0.0035
Mercury	59517-12-10 05:02 G	23459540.59	23459540.71	23459540.85	0.0067	0.0024
Mercury	59518-03-08 05:46 G	23459628.61	23459628.74	23459628.89	0.0067	0.0013
Mercury	59518-06-04 06:29 G	23459716.63	23459716.77	23459716.92	0.0067	0.0003
Mercury	59518-08-31 07:12 G	23459804.66	23459804.80	23459804.94	0.0067	0.0009

Mercury	59518-11-27 07:41 G	23459892.69	23459892.82	23459892.96	0.0067	0.0020
Mercury	59519-02-23 08:24 G	23459980.73	23459980.85	23459980.98	0.0067	0.0031
Mercury	59519-05-22 08:53 G	23460068.77	23460068.87	23460068.99	0.0067	0.0042
Mercury	59519-08-18 09:22 G	23460156.82	23460156.89	23460156.99	0.0067	0.0054
Mercury	59519-11-14 10:05 G	23460244.89	23460244.92	23460244.97	0.0067	0.0065
Venus	59597-12-17 14:38 G	23488768.08	23488768.11	23488768.20	0.0081	0.0079
Venus	59598-07-31 02:24 G	23488993.38	23488993.60	23488993.82	0.0081	0.0004
Venus	59599-03-13 12:43 G	23489218.94	23489219.03	23489219.16	0.0080	0.0070
Mercury	59604-07-01 08:10 G	23491155.76	23491155.84	23491155.96	0.0078	0.0064
Mercury	59604-09-27 10:19 G	23491243.80	23491243.93	23491244.10	0.0077	0.0043
Mercury	59604-12-24 12:43 G	23491331.86	23491332.03	23491332.21	0.0077	0.0021
Mercury	59605-03-22 14:53 G	23491419.94	23491420.12	23491420.30	0.0077	0.0001
Mercury	59605-06-18 16:48 G	23491508.04	23491508.20	23491508.38	0.0077	0.0022
Mercury	59605-09-14 18:58 G	23491596.15	23491596.29	23491596.45	0.0077	0.0042
Mercury	59605-12-11 20:53 G	23491684.28	23491684.37	23491684.48	0.0077	0.0063
Mars	59607-06-17 09:22 G	23492236.68	23492236.89	23492237.11	0.0076	0.0053
Venus	59755-02-23 11:17 G	23546178.82	23546178.97	23546179.15	0.0063	0.0041
Venus	59755-10-06 15:22 G	23546403.92	23546404.14	23546404.36	0.0063	0.0007
Venus	59756-05-18 18:43 G	23546629.10	23546629.28	23546629.49	0.0063	0.0029
Earth	59762-03-17 21:36 G	23548758.35	23548758.40	23548758.49	0.0065	0.0063
Moon	59762-03-18 00:29 G	23548758.52	23548758.52	23548758.53	0.0065	0.0065
Moon	59763-03-19 07:12 G	23549124.61	23549124.80	23549125.02	0.0066	0.0039
Earth	59763-03-19 10:48 G	23549124.74	23549124.95	23549125.17	0.0066	0.0036 *
Mercury	59764-02-02 13:26 G	23549445.06	23549445.06	23549445.08	0.0066	0.0066
Mercury	59764-04-30 13:55 G	23549533.02	23549533.08	23549533.17	0.0066	0.0056
Mercury	59764-07-27 14:38 G	23549621.02	23549621.11	23549621.23	0.0066	0.0045
Mercury	59764-10-23 15:36 G	23549709.02	23549709.15	23549709.27	0.0066	0.0034
Mercury	59765-01-19 15:50 G	23549797.04	23549797.16	23549797.31	0.0067	0.0024
Mercury	59765-04-17 16:34 G	23549885.06	23549885.19	23549885.34	0.0067	0.0013
Mercury	59765-07-14 17:17 G	23549973.08	23549973.22	23549973.37	0.0067	0.0002

Mercury	59765-10-10 18:00 G	23550061.11	23550061.25	23550061.39	0.0067	0.0009
Mercury	59766-01-06 18:29 G	23550149.14	23550149.27	23550149.41	0.0067	0.0021
Mercury	59766-04-04 19:12 G	23550237.18	23550237.30	23550237.43	0.0067	0.0031
Mercury	59766-07-01 19:55 G	23550325.22	23550325.33	23550325.44	0.0067	0.0042
Mercury	59766-09-27 20:24 G	23550413.27	23550413.35	23550413.44	0.0067	0.0054
Mercury	59766-12-24 21:07 G	23550501.35	23550501.38	23550501.42	0.0067	0.0065
Mars	59768-05-08 17:31 G	23551001.93	23551002.23	23551002.57	0.0068	0.0018
Venus	59845-04-11 10:05 G	23579097.85	23579097.92	23579098.03	0.0081	0.0074
Venus	59845-11-22 21:36 G	23579323.18	23579323.40	23579323.62	0.0081	0.0001
Venus	59846-07-06 08:24 G	23579548.76	23579548.85	23579548.94	0.0080	0.0073
Jupiter	59848-06-25 04:34 G	23580268.28	23580268.69	23580269.23	0.0079	0.0047
Earth	59850-09-21 17:17 G	23581087.04	23581087.22	23581087.44	0.0078	0.0050
Moon	59850-09-21 20:24 G	23581087.16	23581087.35	23581087.56	0.0078	0.0052 *
Mercury	59851-08-12 17:02 G	23581412.15	23581412.21	23581412.31	0.0078	0.0069
Mercury	59851-11-08 19:12 G	23581500.17	23581500.30	23581500.45	0.0078	0.0048
Mercury	59852-02-04 21:22 G	23581588.23	23581588.39	23581588.57	0.0077	0.0027
Mercury	59852-05-02 23:46 G	23581676.31	23581676.49	23581676.67	0.0077	0.0005
Mercury	59852-07-30 01:41 G	23581764.40	23581764.57	23581764.75	0.0077	0.0016
Mercury	59852-10-26 03:36 G	23581852.51	23581852.65	23581852.82	0.0077	0.0037
Mercury	59853-01-22 05:46 G	23581940.63	23581940.74	23581940.87	0.0077	0.0058

# 61ST MILLENNIUM CE

This is a list of transits visible from Pluto in the 61st millennium CE.

PLANET	MAX- TRANSIT	C	START	MAX	END	SUNRAD	DEPTH	S
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TIME

Venus	60002-06-18 03:22 G	23636508.51	23636508.64	23636508.80	0.0063	0.0047
Venus	60003-01-29 07:12 G	23636733.60	23636733.80	23636734.03	0.0063	0.0013
Venus	60003-09-11 11:02 G	23636958.76	23636958.96	23636959.18	0.0063	0.0022
Venus	60004-04-23 14:24 G	23637184.04	23637184.10	23637184.22	0.0064	0.0058
Moon	60010-03-22 04:34 G	23639342.43	23639342.69	23639342.96	0.0066	0.0005
Earth	60010-03-22 07:12 G	23639342.55	23639342.80	23639343.06	0.0066	0.0008 *
Mercury	60011-06-11 23:46 G	23639789.46	23639789.49	23639789.56	0.0066	0.0063
Mercury	60011-09-08 00:29 G	23639877.45	23639877.52	23639877.63	0.0066	0.0052
Mercury	60011-12-05 01:26 G	23639965.45	23639965.56	23639965.68	0.0066	0.0040
Mercury	60012-03-02 02:10 G	23640053.46	23640053.59	23640053.72	0.0066	0.0030
Mercury	60012-05-29 02:53 G	23640141.48	23640141.62	23640141.75	0.0067	0.0019
Mercury	60012-08-25 03:22 G	23640229.50	23640229.64	23640229.78	0.0067	0.0008
Mercury	60012-11-21 04:05 G	23640317.53	23640317.67	23640317.81	0.0067	0.0003
Mercury	60013-02-17 04:34 G	23640405.56	23640405.69	23640405.83	0.0067	0.0014
Mercury	60013-05-16 05:02 G	23640493.59	23640493.71	23640493.85	0.0067	0.0025
Mercury	60013-08-12 05:46 G	23640581.63	23640581.74	23640581.87	0.0067	0.0036
Mercury	60013-11-08 06:14 G	23640669.67	23640669.76	23640669.87	0.0067	0.0047
Mercury	60014-02-04 06:43 G	23640757.73	23640757.78	23640757.87	0.0067	0.0059
Venus	60093-03-16 13:26 G	23669652.85	23669653.06	23669653.29	0.0081	0.0010
Venus	60093-10-27 23:46 G	23669878.38	23669878.49	23669878.65	0.0080	0.0064
Earth	60097-09-23 08:53 G	23671304.61	23671304.87	23671305.13	0.0078	0.0002
Moon	60097-09-23 12:29 G	23671304.76	23671305.02	23671305.28	0.0078	0.0006 *
Mercury	60098-12-19 02:24 G	23671756.52	23671756.60	23671756.72	0.0078	0.0063
Mercury	60099-03-17 05:02 G	23671844.56	23671844.71	23671844.86	0.0078	0.0041
Mercury	60099-06-13 06:43 G	23671932.62	23671932.78	23671932.97	0.0077	0.0021
Mercury	60099-09-09 09:07 G	23672020.70	23672020.88	23672021.06	0.0077	0.0002
Mercury	60099-12-06 11:17 G	23672108.80	23672108.97	23672109.14	0.0077	0.0022
Mercury	60100-03-04 13:12 G	23672196.91	23672197.05	23672197.20	0.0077	0.0043

Mercury	60100-05-31 15:07 G	23672285.05	23672285.13	23672285.24	0.0077	0.0064
Mars	60102-02-18 21:07 G	23672913.13	23672913.38	23672913.66	0.0076	0.0036
Venus	60249-10-10 18:43 G	23726838.19	23726838.28	23726838.39	0.0063	0.0056
Venus	60250-05-23 22:19 G	23727063.23	23727063.43	23727063.65	0.0063	0.0022
Venus	60251-01-04 02:24 G	23727288.38	23727288.60	23727288.82	0.0063	0.0013
Venus	60251-08-17 06:00 G	23727513.62	23727513.75	23727513.90	0.0063	0.0048
Moon	60257-03-24 23:46 G	23729560.25	23729560.49	23729560.73	0.0065	0.0027
Earth	60257-03-25 01:41 G	23729560.34	23729560.57	23729560.81	0.0065	0.0027 *
Mercury	60258-10-19 10:19 G	23730133.88	23730133.93	23730133.99	0.0066	0.0060
Mercury	60259-01-15 10:34 G	23730221.87	23730221.94	23730222.05	0.0066	0.0051
Mercury	60259-04-13 11:31 G	23730309.87	23730309.98	23730310.10	0.0066	0.0039
Mercury	60259-07-10 12:14 G	23730397.89	23730398.01	23730398.14	0.0066	0.0028
Mercury	60259-10-06 12:58 G	23730485.90	23730486.04	23730486.18	0.0066	0.0018
Mercury	60260-01-02 13:41 G	23730573.93	23730574.07	23730574.21	0.0067	0.0007
Mercury	60260-03-30 14:10 G	23730661.95	23730662.09	23730662.24	0.0067	0.0005
Mercury	60260-06-26 14:53 G	23730749.98	23730750.12	23730750.26	0.0067	0.0015
Mercury	60260-09-22 15:22 G	23730838.02	23730838.14	23730838.28	0.0067	0.0026
Mercury	60260-12-19 16:05 G	23730926.06	23730926.17	23730926.29	0.0067	0.0037
Mercury	60261-03-17 16:34 G	23731014.10	23731014.19	23731014.30	0.0067	0.0048
Mercury	60261-06-13 17:17 G	23731102.16	23731102.22	23731102.29	0.0067	0.0059
Mars	60263-01-09 10:19 G	23731676.65	23731676.93	23731677.25	0.0068	0.0029
Venus	60340-07-10 02:10 G	23759982.40	23759982.59	23759982.81	0.0081	0.0032
Venus	60341-02-20 12:58 G	23760207.87	23760208.04	23760208.24	0.0081	0.0041
Earth	60344-09-26 18:43 G	23761522.22	23761522.28	23761522.40	0.0079	0.0074
Moon	60344-09-26 23:02 G	23761522.37	23761522.46	23761522.57	0.0079	0.0072 *
Mercury	60346-04-28 10:48 G	23762100.87	23762100.95	23762101.06	0.0078	0.0066
Mercury	60346-07-25 12:58 G	23762188.91	23762189.04	23762189.20	0.0078	0.0044
Mercury	60346-10-21 15:07 G	23762276.97	23762277.13	23762277.31	0.0077	0.0023
Mercury	60347-01-17 17:31 G	23762365.05	23762365.23	23762365.40	0.0077	0.0003
Mercury	60347-04-15 19:26 G	23762453.14	23762453.31	23762453.48	0.0077	0.0019

Mercury	60347-07-12 21:22 G	23762541.25	23762541.39	23762541.55	0.0077	0.0040
Mercury	60347-10-08 23:17 G	23762629.38	23762629.47	23762629.59	0.0077	0.0061
Venus	60497-09-14 10:19 G	23817392.79	23817392.93	23817393.13	0.0063	0.0040
Venus	60498-04-27 14:38 G	23817617.89	23817618.11	23817618.33	0.0063	0.0005
Venus	60498-12-08 18:14 G	23817843.08	23817843.26	23817843.47	0.0063	0.0030
Earth	60505-03-29 03:50 G	23820144.44	23820144.66	23820144.92	0.0066	0.0024
Moon	60505-03-29 06:14 G	23820144.54	23820144.76	23820145.02	0.0066	0.0021 *
Mercury	60506-02-25 19:41 G	23820478.31	23820478.32	23820478.34	0.0066	0.0065
Mercury	60506-05-24 19:55 G	23820566.27	23820566.33	23820566.43	0.0066	0.0056
Mercury	60506-08-20 20:53 G	23820654.27	23820654.37	23820654.48	0.0066	0.0044
Mercury	60506-11-16 21:36 G	23820742.28	23820742.40	23820742.53	0.0066	0.0033
Mercury	60507-02-12 22:19 G	23820830.30	23820830.43	23820830.57	0.0066	0.0023
Mercury	60507-05-11 23:02 G	23820918.32	23820918.46	23820918.60	0.0066	0.0012
Mercury	60507-08-07 23:31 G	23821006.34	23821006.48	23821006.63	0.0067	0.0002
Mercury	60507-11-04 00:14 G	23821094.37	23821094.51	23821094.65	0.0067	0.0010
Mercury	60508-01-31 00:43 G	23821182.40	23821182.53	23821182.67	0.0067	0.0021
Mercury	60508-04-28 01:26 G	23821270.44	23821270.56	23821270.69	0.0067	0.0032
Mercury	60508-07-25 01:55 G	23821358.48	23821358.58	23821358.70	0.0067	0.0043
Mercury	60508-10-21 02:38 G	23821446.54	23821446.61	23821446.70	0.0067	0.0054
Mercury	60509-01-17 03:07 G	23821534.61	23821534.63	23821534.68	0.0067	0.0066
Mars	60511-04-22 12:58 G	23822359.95	23822360.04	23822360.19	0.0068	0.0064
Venus	60587-11-01 12:29 G	23850311.90	23850312.02	23850312.16	0.0081	0.0065
Venus	60588-06-13 23:31 G	23850537.27	23850537.48	23850537.71	0.0081	0.0008
Venus	60589-01-25 10:19 G	23850762.91	23850762.93	23850762.95	0.0080	0.0080
Moon	60592-09-30 01:41 G	23852106.32	23852106.57	23852106.84	0.0078	0.0010
Earth	60592-09-30 05:02 G	23852106.46	23852106.71	23852106.98	0.0078	0.0014 *
Mercury	60593-09-03 17:46 G	23852445.24	23852445.24	23852445.29	0.0078	0.0077
Mercury	60593-11-30 19:55 G	23852533.23	23852533.33	23852533.47	0.0078	0.0056
Mercury	60594-02-26 22:34 G	23852621.28	23852621.44	23852621.60	0.0078	0.0034
Mercury	60594-05-26 00:29 G	23852709.35	23852709.52	23852709.70	0.0077	0.0013



Mercury	60594-08-22 02:38 G	23852797.44	23852797.61	23852797.79	0.0077	0.0008
Mercury	60594-11-18 04:34 G	23852885.53	23852885.69	23852885.86	0.0077	0.0029
Mercury	60595-02-14 06:29 G	23852973.65	23852973.77	23852973.92	0.0077	0.0050
Mercury	60595-05-13 08:24 G	23853061.80	23853061.85	23853061.94	0.0077	0.0071
Mars	60596-10-21 06:58 G	23853588.63	23853588.79	23853589.02	0.0076	0.0057
Venus	60745-01-07 21:36 G	23907722.38	23907722.40	23907722.48	0.0063	0.0061
Venus	60745-08-21 01:41 G	23907947.38	23907947.57	23907947.78	0.0063	0.0027
Venus	60746-04-03 05:46 G	23908172.52	23908172.74	23908172.96	0.0063	0.0008
Venus	60746-11-14 09:07 G	23908397.73	23908397.88	23908398.06	0.0063	0.0043
Earth	60752-03-31 16:34 G	23910361.97	23910362.19	23910362.42	0.0065	0.0032
Moon	60752-03-31 17:46 G	23910362.03	23910362.24	23910362.47	0.0065	0.0030 *
Moon	60753-04-02 01:41 G	23910728.57	23910728.57	23910728.61	0.0066	0.0066
Mercury	60753-10-01 05:02 G	23910910.69	23910910.71	23910910.77	0.0066	0.0063
Mercury	60753-12-28 05:46 G	23910998.67	23910998.74	23910998.84	0.0066	0.0052
Mercury	60754-03-26 06:29 G	23911086.67	23911086.77	23911086.89	0.0066	0.0042
Mercury	60754-06-22 07:12 G	23911174.68	23911174.80	23911174.93	0.0066	0.0031
Mercury	60754-09-18 07:41 G	23911262.70	23911262.82	23911262.97	0.0066	0.0021
Mercury	60754-12-15 08:24 G	23911350.72	23911350.85	23911351.00	0.0066	0.0010
Mercury	60755-03-13 09:07 G	23911438.74	23911438.88	23911439.03	0.0067	0.0003
Mercury	60755-06-09 09:50 G	23911526.77	23911526.91	23911527.05	0.0067	0.0013
Mercury	60755-09-05 10:19 G	23911614.80	23911614.93	23911615.07	0.0067	0.0024
Mercury	60755-12-02 10:48 G	23911702.84	23911702.95	23911703.09	0.0067	0.0035
Mercury	60756-02-28 11:31 G	23911790.89	23911790.98	23911791.09	0.0067	0.0046
Mercury	60756-05-26 12:00 G	23911878.94	23911879.00	23911879.09	0.0067	0.0057
Venus	60835-10-07 06:00 G	23940866.57	23940866.75	23940866.96	0.0081	0.0039
Venus	60836-05-19 16:48 G	23941092.01	23941092.20	23941092.41	0.0080	0.0034
Moon	60840-10-04 12:14 G	23942691.00	23942691.01	23942691.09	0.0078	0.0077
Mercury	60841-04-09 01:41 G	23942877.57	23942877.57	23942877.62	0.0078	0.0077
Mercury	60841-07-06 03:50 G	23942965.56	23942965.66	23942965.80	0.0078	0.0056
Mercury	60841-10-02 06:00 G	23943053.61	23943053.75	23943053.92	0.0078	0.0035

Mercury	60841-12-29 08:24 G	23943141.68	23943141.85	23943142.03	0.0077	0.0013
Mercury	60842-03-27 10:34 G	23943229.76	23943229.94	23943230.11	0.0077	0.0008
Mercury	60842-06-23 12:14 G	23943317.86	23943318.01	23943318.19	0.0077	0.0030
Mercury	60842-09-19 14:24 G	23943405.98	23943406.10	23943406.24	0.0077	0.0050
Mercury	60842-12-16 16:19 G	23943494.13	23943494.18	23943494.26	0.0077	0.0071
Mars	60845-02-01 17:31 G	23944272.01	23944272.23	23944272.49	0.0076	0.0044
Venus	60992-12-12 10:19 G	23998276.84	23998276.93	23998277.03	0.0063	0.0056
Venus	60993-07-25 14:10 G	23998501.89	23998502.09	23998502.30	0.0063	0.0022
Venus	60994-03-07 17:46 G	23998727.04	23998727.24	23998727.47	0.0063	0.0013
Venus	60994-10-18 21:07 G	23998952.27	23998952.38	23998952.56	0.0064	0.0048
Moon	61000-04-04 10:05 G	24000945.66	24000945.92	24000946.19	0.0065	0.0005
Earth	61000-04-04 12:58 G	24000945.78	24000946.04	24000946.30	0.0065	0.0002 *

# 62ND MILLENNIUM CE

This is a list of transits visible from Pluto in the 62nd millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	61001-08-02 14:24 G	24001431.04	24001431.10	24001431.19	0.0066	0.0056		
Mercury	61001-10-29 15:07 G	24001519.04	24001519.13	24001519.25	0.0066	0.0045		
Mercury	61002-01-25 15:50 G	24001607.05	24001607.16	24001607.29	0.0066	0.0035		
Mercury	61002-04-23 16:48 G	24001695.06	24001695.20	24001695.33	0.0066	0.0023		
Mercury	61002-07-20 17:17 G	24001783.08	24001783.22	24001783.37	0.0066	0.0013		
Mercury	61002-10-16 18:00 G	24001871.11	24001871.25	24001871.39	0.0066	0.0002		

Mercury	61003-01-12 18:43 G	24001959.14	24001959.28	24001959.42	0.0067	0.0009
Mercury	61003-04-10 19:12 G	24002047.17	24002047.30	24002047.44	0.0067	0.0020
Mercury	61003-07-07 19:55 G	24002135.21	24002135.33	24002135.46	0.0067	0.0031
Mercury	61003-10-03 20:24 G	24002223.25	24002223.35	24002223.47	0.0067	0.0042
Mercury	61003-12-30 20:53 G	24002311.30	24002311.37	24002311.47	0.0067	0.0053
Mercury	61004-03-27 21:36 G	24002399.37	24002399.40	24002399.45	0.0067	0.0064
Venus	61083-09-11 21:07 G	24031421.18	24031421.38	24031421.60	0.0081	0.0024
Venus	61084-04-24 07:55 G	24031646.66	24031646.83	24031647.01	0.0080	0.0049
Earth	61087-10-07 06:43 G	24032907.58	24032907.78	24032908.02	0.0079	0.0041
Moon	61087-10-07 10:48 G	24032907.74	24032907.95	24032908.18	0.0079	0.0042 *
Mercury	61089-02-08 11:02 G	24033397.87	24033397.96	24033398.08	0.0078	0.0063
Mercury	61089-05-07 13:12 G	24033485.91	24033486.05	24033486.21	0.0078	0.0042
Mercury	61089-08-03 15:22 G	24033573.97	24033574.14	24033574.31	0.0078	0.0020
Mercury	61089-10-30 17:31 G	24033662.05	24033662.23	24033662.41	0.0077	0.0001
Mercury	61090-01-26 19:12 G	24033750.15	24033750.30	24033750.48	0.0077	0.0023
Mercury	61090-04-24 21:07 G	24033838.25	24033838.38	24033838.55	0.0077	0.0043
Mercury	61090-07-21 23:31 G	24033926.39	24033926.48	24033926.58	0.0077	0.0063
Venus	61240-11-16 20:53 G	24088831.29	24088831.37	24088831.48	0.0063	0.0056
Venus	61241-06-30 00:43 G	24089056.33	24089056.53	24089056.75	0.0063	0.0022
Venus	61242-02-10 04:48 G	24089281.49	24089281.70	24089281.92	0.0063	0.0012
Venus	61242-09-23 08:10 G	24089506.72	24089506.84	24089507.01	0.0063	0.0048
Earth	61248-04-07 06:29 G	24091529.54	24091529.77	24091530.03	0.0066	0.0020
Moon	61248-04-07 09:36 G	24091529.66	24091529.90	24091530.15	0.0066	0.0017 *
Mercury	61249-03-06 22:48 G	24091863.42	24091863.45	24091863.51	0.0066	0.0063
Mercury	61249-06-02 23:31 G	24091951.41	24091951.48	24091951.58	0.0066	0.0052
Mercury	61249-08-30 00:29 G	24092039.41	24092039.52	24092039.63	0.0066	0.0041
Mercury	61249-11-26 00:43 G	24092127.42	24092127.53	24092127.67	0.0066	0.0031
Mercury	61250-02-22 01:26 G	24092215.43	24092215.56	24092215.71	0.0066	0.0021
Mercury	61250-05-21 02:10 G	24092303.46	24092303.59	24092303.74	0.0066	0.0010
Mercury	61250-08-17 02:53 G	24092391.48	24092391.62	24092391.77	0.0066	0.0003

Mercury	61250-11-13 03:36 G	24092479.51	24092479.65	24092479.79	0.0067	0.0013
Mercury	61251-02-09 04:05 G	24092567.54	24092567.67	24092567.81	0.0067	0.0024
Mercury	61251-05-08 04:34 G	24092655.58	24092655.69	24092655.83	0.0067	0.0035
Mercury	61251-08-04 05:17 G	24092743.63	24092743.72	24092743.84	0.0067	0.0046
Mercury	61251-10-31 06:14 G	24092831.69	24092831.76	24092831.83	0.0067	0.0056
Mars	61254-04-01 09:50 G	24093714.61	24093714.91	24093715.24	0.0068	0.0024
Venus	61331-08-17 07:55 G	24121975.64	24121975.83	24121976.06	0.0081	0.0025
Venus	61332-03-29 18:43 G	24122201.12	24122201.28	24122201.47	0.0080	0.0048
Moon	61335-10-10 22:34 G	24123491.19	24123491.44	24123491.70	0.0078	0.0016
Earth	61335-10-11 01:26 G	24123491.31	24123491.56	24123491.82	0.0078	0.0012 *
Mercury	61336-12-10 18:43 G	24123918.18	24123918.28	24123918.39	0.0078	0.0061
Mercury	61337-03-08 20:38 G	24124006.22	24124006.36	24124006.52	0.0078	0.0040
Mercury	61337-06-04 22:48 G	24124094.28	24124094.45	24124094.62	0.0078	0.0019
Mercury	61337-09-01 00:58 G	24124182.36	24124182.54	24124182.71	0.0077	0.0003
Mercury	61337-11-28 02:38 G	24124270.45	24124270.61	24124270.79	0.0077	0.0024
Mercury	61338-02-24 04:34 G	24124358.56	24124358.69	24124358.85	0.0077	0.0045
Mercury	61338-05-23 06:29 G	24124446.70	24124446.77	24124446.88	0.0077	0.0065
Venus	61489-06-04 09:22 G	24179610.71	24179610.89	24179611.10	0.0063	0.0029
Venus	61490-01-15 13:26 G	24179835.84	24179836.06	24179836.28	0.0063	0.0005
Venus	61490-08-28 17:02 G	24180061.05	24180061.21	24180061.40	0.0063	0.0040
Moon	61496-04-10 17:02 G	24182112.99	24182113.21	24182113.45	0.0066	0.0030
Earth	61496-04-10 20:38 G	24182113.14	24182113.36	24182113.60	0.0066	0.0029 *
Mercury	61497-01-06 06:58 G	24182383.79	24182383.79	24182383.83	0.0066	0.0065
Mercury	61497-04-04 07:55 G	24182471.75	24182471.83	24182471.91	0.0066	0.0054
Mercury	61497-07-01 08:10 G	24182559.75	24182559.84	24182559.97	0.0066	0.0044
Mercury	61497-09-27 09:07 G	24182647.76	24182647.88	24182648.01	0.0066	0.0033
Mercury	61497-12-24 09:50 G	24182735.78	24182735.91	24182736.05	0.0066	0.0022
Mercury	61498-03-22 10:34 G	24182823.80	24182823.94	24182824.08	0.0066	0.0011
Mercury	61498-06-18 11:17 G	24182911.82	24182911.97	24182912.11	0.0066	0.0002
Mercury	61498-09-14 11:46 G	24182999.85	24182999.99	24183000.13	0.0066	0.0010

Mercury	61498-12-11 12:14 G	24183087.88	24183088.01	24183088.16	0.0067	0.0022
Mercury	61499-03-09 13:12 G	24183175.92	24183176.05	24183176.17	0.0067	0.0032
Mercury	61499-06-05 13:41 G	24183263.97	24183264.07	24183264.18	0.0067	0.0043
Mercury	61499-09-01 14:10 G	24183352.02	24183352.09	24183352.18	0.0067	0.0054
Mercury	61499-11-28 14:53 G	24183440.10	24183440.12	24183440.16	0.0067	0.0065
Mars	61502-07-13 04:48 G	24184396.37	24184396.70	24184397.04	0.0068	0.0009
Venus	61579-07-22 16:34 G	24212530.00	24212530.19	24212530.40	0.0081	0.0035
Venus	61580-03-04 03:07 G	24212755.46	24212755.63	24212755.85	0.0080	0.0038
Earth	61583-10-14 16:19 G	24214074.92	24214075.18	24214075.44	0.0078	0.0003
Moon	61583-10-14 18:58 G	24214075.02	24214075.29	24214075.55	0.0078	0.0004 *
Mercury	61584-10-12 01:12 G	24214438.47	24214438.55	24214438.65	0.0078	0.0066
Mercury	61585-01-08 03:22 G	24214526.50	24214526.64	24214526.78	0.0078	0.0045
Mercury	61585-04-06 05:17 G	24214614.56	24214614.72	24214614.89	0.0078	0.0024
Mercury	61585-07-03 07:26 G	24214702.64	24214702.81	24214702.99	0.0077	0.0003
Mercury	61585-09-29 09:22 G	24214790.73	24214790.89	24214791.07	0.0077	0.0018
Mercury	61585-12-26 11:17 G	24214878.83	24214878.97	24214879.13	0.0077	0.0039
Mercury	61586-03-24 13:12 G	24214966.96	24214967.05	24214967.17	0.0077	0.0060
Venus	61737-05-09 16:19 G	24270165.03	24270165.18	24270165.36	0.0063	0.0041
Venus	61737-12-20 20:10 G	24270390.13	24270390.34	24270390.57	0.0063	0.0008
Venus	61738-08-03 00:00 G	24270615.31	24270615.50	24270615.71	0.0063	0.0028
Venus	61739-03-16 03:36 G	24270840.64	24270840.65	24270840.71	0.0064	0.0063
Earth	61744-04-14 07:41 G	24272696.61	24272696.82	24272697.06	0.0065	0.0030
Moon	61744-04-14 11:17 G	24272696.75	24272696.97	24272697.20	0.0065	0.0033 *
Mercury	61745-02-03 15:36 G	24272992.10	24272992.15	24272992.21	0.0066	0.0060
Mercury	61745-05-02 16:05 G	24273080.09	24273080.17	24273080.28	0.0066	0.0050
Mercury	61745-07-29 16:48 G	24273168.09	24273168.20	24273168.33	0.0066	0.0039
Mercury	61745-10-25 17:31 G	24273256.11	24273256.23	24273256.37	0.0066	0.0028
Mercury	61746-01-21 18:14 G	24273344.12	24273344.26	24273344.40	0.0066	0.0017
Mercury	61746-04-19 18:58 G	24273432.14	24273432.29	24273432.43	0.0066	0.0007
Mercury	61746-07-16 19:26 G	24273520.17	24273520.31	24273520.46	0.0066	0.0005

Mercury	61746-10-12 19:55 G	24273608.20	24273608.33	24273608.48	0.0066	0.0016
Mercury	61747-01-08 20:53 G	24273696.24	24273696.37	24273696.50	0.0067	0.0026
Mercury	61747-04-06 21:22 G	24273784.28	24273784.39	24273784.51	0.0067	0.0037
Mercury	61747-07-03 21:50 G	24273872.32	24273872.41	24273872.52	0.0067	0.0048
Mercury	61747-09-29 22:34 G	24273960.38	24273960.44	24273960.51	0.0067	0.0059
Mars	61750-10-21 17:17 G	24275077.94	24275078.22	24275078.55	0.0068	0.0030
Venus	61827-06-26 20:38 G	24303084.25	24303084.36	24303084.53	0.0081	0.0063
Venus	61828-02-07 08:10 G	24303309.62	24303309.84	24303310.06	0.0080	0.0010
Moon	61831-10-17 23:31 G	24304658.23	24304658.48	24304658.73	0.0078	0.0003
Earth	61831-10-18 00:29 G	24304658.26	24304658.52	24304658.78	0.0078	0.0007 *
Mercury	61832-11-09 07:55 G	24305046.74	24305046.83	24305046.94	0.0078	0.0063
Mercury	61833-02-05 10:05 G	24305134.78	24305134.92	24305135.07	0.0078	0.0042
Mercury	61833-05-04 12:14 G	24305222.84	24305223.01	24305223.18	0.0078	0.0021
Mercury	61833-07-31 14:24 G	24305310.92	24305311.10	24305311.27	0.0077	0.0001
Mercury	61833-10-27 16:19 G	24305399.01	24305399.18	24305399.35	0.0077	0.0021
Mercury	61834-01-23 18:14 G	24305487.12	24305487.26	24305487.41	0.0077	0.0042
Mercury	61834-04-21 20:10 G	24305575.25	24305575.34	24305575.45	0.0077	0.0063
Venus	61985-04-13 21:36 G	24360719.35	24360719.40	24360719.52	0.0063	0.0058
Venus	61985-11-25 01:41 G	24360944.38	24360944.57	24360944.79	0.0063	0.0024
Venus	61986-07-08 05:46 G	24361169.53	24361169.74	24361169.96	0.0063	0.0011
Venus	61987-02-18 09:22 G	24361394.76	24361394.89	24361395.06	0.0064	0.0046
Moon	61992-04-17 13:41 G	24363279.84	24363280.07	24363280.32	0.0065	0.0023
Earth	61992-04-17 16:48 G	24363279.97	24363280.20	24363280.45	0.0065	0.0023 *
Mercury	61993-03-03 23:17 G	24363600.42	24363600.47	24363600.55	0.0066	0.0059
Mercury	61993-05-31 00:14 G	24363688.42	24363688.51	24363688.61	0.0066	0.0048
Mercury	61993-08-27 00:29 G	24363776.42	24363776.52	24363776.66	0.0066	0.0038
Mercury	61993-11-23 01:26 G	24363864.43	24363864.56	24363864.70	0.0066	0.0027
Mercury	61994-02-19 02:10 G	24363952.45	24363952.59	24363952.73	0.0066	0.0016
Mercury	61994-05-18 02:53 G	24364040.47	24364040.62	24364040.76	0.0066	0.0005
Mercury	61994-08-14 03:22 G	24364128.50	24364128.64	24364128.79	0.0066	0.0006

Mercury	61994-11-10 04:05 G	24364216.53	24364216.67	24364216.81	0.0066	0.0016
Mercury	61995-02-06 04:34 G	24364304.57	24364304.69	24364304.83	0.0067	0.0028
Mercury	61995-05-05 05:02 G	24364392.61	24364392.71	24364392.84	0.0067	0.0039
Mercury	61995-08-01 05:46 G	24364480.66	24364480.74	24364480.85	0.0067	0.0050
Mercury	61995-10-28 06:43 G	24364568.72	24364568.78	24364568.84	0.0067	0.0060
Mars	61999-01-31 00:14 G	24365759.27	24365759.51	24365759.81	0.0068	0.0041

# 63RD MILLENNIUM CE

This is a list of transits visible from Pluto in the 63rd millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	62076-01-11 11:17 G		24393863.76	24393863.97	24393864.18	0.0081	0.0022	
Venus	62076-08-23 21:50 G		24394089.25	24394089.41	24394089.60	0.0080	0.0049	
Moon	62079-10-20 06:58 G		24395241.53	24395241.79	24395242.05	0.0079	0.0022	
Earth	62079-10-20 06:43 G		24395241.54	24395241.78	24395242.04	0.0079	0.0023	*
Mercury	62080-12-06 14:24 G		24395655.01	24395655.10	24395655.21	0.0078	0.0063	
Mercury	62081-03-04 16:34 G		24395743.05	24395743.19	24395743.34	0.0078	0.0042	
Mercury	62081-05-31 18:43 G		24395831.11	24395831.28	24395831.45	0.0078	0.0021	
Mercury	62081-08-27 20:53 G		24395919.19	24395919.37	24395919.54	0.0078	0.0001	
Mercury	62081-11-23 22:48 G		24396007.28	24396007.45	24396007.62	0.0077	0.0022	
Mercury	62082-02-20 00:43 G		24396095.39	24396095.53	24396095.68	0.0077	0.0042	
Mercury	62082-05-19 02:38 G		24396183.52	24396183.61	24396183.72	0.0077	0.0063	
Venus	62233-10-30 06:00 G		24451498.62	24451498.75	24451498.93	0.0063	0.0044	

Venus	62234-06-12 10:05 G	24451723.71	24451723.92	24451724.15	0.0063	0.0010
Venus	62235-01-23 13:55 G	24451948.89	24451949.08	24451949.30	0.0063	0.0025
Venus	62235-09-05 17:31 G	24452174.18	24452174.23	24452174.33	0.0064	0.0060
Earth	62240-04-20 23:31 G	24453863.24	24453863.48	24453863.75	0.0065	0.0010
Moon	62240-04-21 01:26 G	24453863.31	24453863.56	24453863.83	0.0065	0.0006 *
Mercury	62241-04-01 06:43 G	24454208.74	24454208.78	24454208.85	0.0066	0.0061
Mercury	62241-06-28 07:26 G	24454296.73	24454296.81	24454296.92	0.0066	0.0050
Mercury	62241-09-24 08:24 G	24454384.74	24454384.85	24454384.97	0.0066	0.0039
Mercury	62241-12-21 08:53 G	24454472.75	24454472.87	24454473.01	0.0066	0.0029
Mercury	62242-03-19 09:36 G	24454560.76	24454560.90	24454561.04	0.0066	0.0018
Mercury	62242-06-15 10:19 G	24454648.79	24454648.93	24454649.07	0.0066	0.0007
Mercury	62242-09-11 11:02 G	24454736.81	24454736.96	24454737.10	0.0066	0.0004
Mercury	62242-12-08 11:31 G	24454824.84	24454824.98	24454825.13	0.0066	0.0015
Mercury	62243-03-06 12:14 G	24454912.88	24454913.01	24454913.14	0.0066	0.0026
Mercury	62243-06-02 12:43 G	24455000.92	24455001.03	24455001.16	0.0067	0.0037
Mercury	62243-08-29 13:12 G	24455088.97	24455089.05	24455089.16	0.0067	0.0048
Mercury	62243-11-25 13:55 G	24455177.03	24455177.08	24455177.16	0.0067	0.0059
Mars	62247-05-12 02:24 G	24456440.36	24456440.60	24456440.91	0.0068	0.0041
Venus	62323-12-17 10:48 G	24484417.86	24484417.95	24484418.10	0.0081	0.0068
Venus	62324-07-29 22:19 G	24484643.21	24484643.43	24484643.66	0.0080	0.0005
Venus	62325-03-12 08:24 G	24484868.80	24484868.85	24484868.96	0.0080	0.0075
Earth	62327-10-24 07:41 G	24485824.68	24485824.82	24485825.02	0.0079	0.0060
Moon	62327-10-24 09:50 G	24485824.79	24485824.91	24485825.08	0.0079	0.0064 *
Mercury	62329-01-04 19:41 G	24486263.27	24486263.32	24486263.39	0.0078	0.0073
Mercury	62329-04-02 21:36 G	24486351.29	24486351.40	24486351.55	0.0078	0.0052
Mercury	62329-06-29 23:46 G	24486439.34	24486439.49	24486439.66	0.0078	0.0031
Mercury	62329-09-26 01:55 G	24486527.41	24486527.58	24486527.76	0.0078	0.0010
Mercury	62329-12-23 04:05 G	24486615.50	24486615.67	24486615.84	0.0077	0.0012
Mercury	62330-03-21 06:00 G	24486703.59	24486703.75	24486703.91	0.0077	0.0033
Mercury	62330-06-17 07:55 G	24486791.71	24486791.83	24486791.96	0.0077	0.0053



Mercury	62330-09-13 09:50 G	24486879.88	24486879.91	24486879.96	0.0077	0.0074
Venus	62482-05-16 14:10 G	24542277.91	24542278.09	24542278.29	0.0063	0.0032
Venus	62482-12-27 18:00 G	24542503.03	24542503.25	24542503.48	0.0063	0.0002
Venus	62483-08-09 21:36 G	24542728.24	24542728.40	24542728.60	0.0064	0.0037
Moon	62488-04-23 04:48 G	24544446.46	24544446.70	24544446.96	0.0065	0.0008
Earth	62488-04-23 06:00 G	24544446.50	24544446.75	24544447.01	0.0065	0.0007 *
Mercury	62489-04-28 13:55 G	24544817.07	24544817.08	24544817.14	0.0066	0.0064
Mercury	62489-07-25 14:53 G	24544905.05	24544905.12	24544905.22	0.0066	0.0053
Mercury	62489-10-21 15:36 G	24544993.05	24544993.15	24544993.27	0.0066	0.0042
Mercury	62490-01-17 16:19 G	24545081.06	24545081.18	24545081.31	0.0066	0.0031
Mercury	62490-04-15 16:48 G	24545169.07	24545169.20	24545169.35	0.0066	0.0021
Mercury	62490-07-12 17:31 G	24545257.09	24545257.23	24545257.38	0.0066	0.0010
Mercury	62490-10-08 18:14 G	24545345.12	24545345.26	24545345.41	0.0066	0.0002
Mercury	62491-01-04 18:58 G	24545433.15	24545433.29	24545433.43	0.0066	0.0012
Mercury	62491-04-02 19:41 G	24545521.18	24545521.32	24545521.45	0.0066	0.0023
Mercury	62491-06-29 20:10 G	24545609.22	24545609.34	24545609.47	0.0066	0.0034
Mercury	62491-09-25 20:38 G	24545697.27	24545697.36	24545697.48	0.0067	0.0045
Mercury	62491-12-22 21:22 G	24545785.32	24545785.39	24545785.48	0.0067	0.0056
Mercury	62492-03-19 22:05 G	24545873.42	24545873.42	24545873.43	0.0067	0.0067
Mars	62495-08-20 02:38 G	24547121.35	24547121.61	24547121.92	0.0068	0.0037
Venus	62572-07-02 22:48 G	24575197.27	24575197.45	24575197.66	0.0081	0.0039
Venus	62573-02-13 09:36 G	24575422.71	24575422.90	24575423.11	0.0080	0.0033
Mercury	62577-04-30 03:07 G	24576959.53	24576959.63	24576959.75	0.0078	0.0060
Mercury	62577-07-27 05:17 G	24577047.58	24577047.72	24577047.88	0.0078	0.0039
Mercury	62577-10-23 07:26 G	24577135.64	24577135.81	24577135.98	0.0078	0.0018
Mercury	62578-01-19 09:22 G	24577223.72	24577223.89	24577224.07	0.0078	0.0004
Mercury	62578-04-17 11:17 G	24577311.81	24577311.97	24577312.14	0.0077	0.0025
Mercury	62578-07-14 13:12 G	24577399.92	24577400.05	24577400.20	0.0077	0.0045
Mercury	62578-10-10 15:07 G	24577488.06	24577488.13	24577488.23	0.0077	0.0066
Venus	62730-04-21 16:34 G	24632832.14	24632832.19	24632832.31	0.0063	0.0058

Venus	62730-12-02 20:38 G	24633057.17	24633057.36	24633057.58	0.0063	0.0024
Venus	62731-07-16 00:29 G	24633282.31	24633282.52	24633282.75	0.0063	0.0011
Venus	62732-02-26 04:19 G	24633507.54	24633507.68	24633507.85	0.0064	0.0045
Moon	62736-04-27 08:38 G	24635029.64	24635029.86	24635030.12	0.0065	0.0027
Earth	62736-04-27 10:05 G	24635029.69	24635029.92	24635030.15	0.0065	0.0029 *
Mercury	62737-08-23 21:36 G	24635513.35	24635513.40	24635513.48	0.0066	0.0059
Mercury	62737-11-19 22:34 G	24635601.35	24635601.44	24635601.54	0.0066	0.0048
Mercury	62738-02-15 23:17 G	24635689.35	24635689.47	24635689.59	0.0066	0.0037
Mercury	62738-05-14 23:46 G	24635777.37	24635777.49	24635777.63	0.0066	0.0027
Mercury	62738-08-11 00:29 G	24635865.38	24635865.52	24635865.67	0.0066	0.0016
Mercury	62738-11-07 01:12 G	24635953.41	24635953.55	24635953.70	0.0066	0.0005
Mercury	62739-02-03 01:55 G	24636041.44	24636041.58	24636041.72	0.0066	0.0006
Mercury	62739-05-02 02:38 G	24636129.47	24636129.61	24636129.75	0.0066	0.0017
Mercury	62739-07-29 03:07 G	24636217.50	24636217.63	24636217.77	0.0066	0.0028
Mercury	62739-10-25 03:36 G	24636305.55	24636305.65	24636305.78	0.0066	0.0039
Mercury	62740-01-21 04:19 G	24636393.60	24636393.68	24636393.79	0.0067	0.0050
Mercury	62740-04-18 04:48 G	24636481.66	24636481.70	24636481.78	0.0067	0.0061
Mars	62743-11-29 21:50 G	24637802.10	24637802.41	24637802.74	0.0068	0.0024
Venus	62821-01-18 07:41 G	24665976.60	24665976.82	24665977.03	0.0080	0.0022
Venus	62821-08-31 17:46 G	24666202.09	24666202.24	24666202.44	0.0080	0.0049
Moon	62824-10-30 08:38 G	24667357.62	24667357.86	24667358.10	0.0078	0.0029
Earth	62824-10-30 11:17 G	24667357.76	24667357.97	24667358.23	0.0078	0.0034 *
Mercury	62825-05-28 07:26 G	24667567.80	24667567.81	24667567.85	0.0078	0.0077
Mercury	62825-08-24 09:22 G	24667655.79	24667655.89	24667656.03	0.0078	0.0056
Mercury	62825-11-20 11:31 G	24667743.84	24667743.98	24667744.15	0.0078	0.0035
Mercury	62826-02-16 13:41 G	24667831.90	24667832.07	24667832.25	0.0078	0.0014
Mercury	62826-05-15 15:50 G	24667919.99	24667920.16	24667920.33	0.0078	0.0007
Mercury	62826-08-11 17:31 G	24668008.08	24668008.23	24668008.40	0.0077	0.0029
Mercury	62826-11-07 19:26 G	24668096.19	24668096.31	24668096.46	0.0077	0.0050
Mercury	62827-02-03 21:22 G	24668184.34	24668184.39	24668184.48	0.0077	0.0070

Venus	62978-11-05 23:02 G	24723611.35	24723611.46	24723611.61	0.0063	0.0051
Venus	62979-06-19 02:53 G	24723836.42	24723836.62	24723836.85	0.0063	0.0018
Venus	62980-01-30 06:58 G	24724061.59	24724061.79	24724062.01	0.0063	0.0017
Venus	62980-09-11 10:48 G	24724286.84	24724286.95	24724287.09	0.0064	0.0052
Earth	62984-04-29 13:26 G	24725612.94	24725613.06	24725613.23	0.0065	0.0053
Moon	62984-04-29 15:07 G	24725613.00	24725613.13	24725613.30	0.0065	0.0052 *
Moon	62985-04-30 22:05 G	24725979.27	24725979.42	24725979.64	0.0065	0.0046
Earth	62985-05-01 01:41 G	24725979.41	24725979.57	24725979.78	0.0065	0.0046 *
Mercury	62985-09-20 04:34 G	24726121.69	24726121.69	24726121.73	0.0065	0.0065
Mercury	62985-12-17 05:31 G	24726209.65	24726209.73	24726209.81	0.0066	0.0054
Mercury	62986-03-15 05:46 G	24726297.65	24726297.74	24726297.87	0.0066	0.0044
Mercury	62986-06-11 06:43 G	24726385.66	24726385.78	24726385.91	0.0066	0.0033
Mercury	62986-09-07 07:26 G	24726473.68	24726473.81	24726473.95	0.0066	0.0022
Mercury	62986-12-04 08:10 G	24726561.70	24726561.84	24726561.98	0.0066	0.0011
Mercury	62987-03-02 08:53 G	24726649.72	24726649.87	24726650.01	0.0066	0.0001
Mercury	62987-05-29 09:36 G	24726737.75	24726737.90	24726738.04	0.0066	0.0011
Mercury	62987-08-25 10:05 G	24726825.79	24726825.92	24726826.06	0.0066	0.0021
Mercury	62987-11-21 10:34 G	24726913.82	24726913.94	24726914.08	0.0066	0.0032
Mercury	62988-02-17 11:02 G	24727001.87	24727001.96	24727002.09	0.0066	0.0044
Mercury	62988-05-15 11:46 G	24727089.92	24727089.99	24727090.09	0.0067	0.0055
Mercury	62988-08-11 12:14 G	24727178.01	24727178.01	24727178.06	0.0067	0.0066
Mars	62992-03-08 15:50 G	24728482.82	24728483.16	24728483.50	0.0068	0.0009

# 64TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 64th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	63068-12-23 06:00	G	24756530.68	24756530.75	24756530.86	0.0081	0.0073	
Venus	63069-08-05 17:17	G	24756756.00	24756756.22	24756756.44	0.0080	0.0002	
Venus	63070-03-19 03:22	G	24756981.55	24756981.64	24756981.78	0.0080	0.0069	
Earth	63072-11-02 10:48	G	24757940.70	24757940.95	24757941.22	0.0079	0.0012	
Moon	63072-11-02 13:55	G	24757940.83	24757941.08	24757941.35	0.0079	0.0013	*
Mercury	63073-09-21 14:10	G	24758264.03	24758264.09	24758264.18	0.0078	0.0070	
Mercury	63073-12-18 16:05	G	24758352.05	24758352.17	24758352.32	0.0078	0.0049	
Mercury	63074-03-16 18:14	G	24758440.11	24758440.26	24758440.43	0.0078	0.0028	
Mercury	63074-06-12 20:24	G	24758528.18	24758528.35	24758528.53	0.0078	0.0007	
Mercury	63074-09-08 22:19	G	24758616.27	24758616.43	24758616.61	0.0078	0.0015	
Mercury	63074-12-06 00:14	G	24758704.37	24758704.51	24758704.67	0.0077	0.0036	
Mercury	63075-03-04 02:10	G	24758792.49	24758792.59	24758792.72	0.0077	0.0057	
Mercury	63075-05-31 04:19	G	24758880.68	24758880.68	24758880.69	0.0077	0.0077	
Venus	63227-05-24 04:05	G	24814390.55	24814390.67	24814390.84	0.0063	0.0048	
Venus	63228-01-04 08:10	G	24814615.63	24814615.84	24814616.07	0.0063	0.0014	
Venus	63228-08-16 11:46	G	24814840.80	24814840.99	24814841.22	0.0063	0.0021	
Venus	63229-03-29 15:50	G	24815066.06	24815066.16	24815066.28	0.0064	0.0055	
Earth	63233-05-04 03:36	G	24816562.40	24816562.65	24816562.90	0.0065	0.0013	
Moon	63233-05-04 06:43	G	24816562.55	24816562.78	24816563.04	0.0065	0.0017	*
Mercury	63234-01-14 11:46	G	24816817.97	24816817.99	24816818.03	0.0065	0.0064	
Mercury	63234-04-12 12:14	G	24816905.94	24816906.01	24816906.11	0.0066	0.0054	
Mercury	63234-07-09 12:58	G	24816993.94	24816994.04	24816994.16	0.0066	0.0043	
Mercury	63234-10-05 13:41	G	24817081.95	24817082.07	24817082.21	0.0066	0.0032	
Mercury	63235-01-01 14:38	G	24817169.97	24817170.11	24817170.24	0.0066	0.0021	
Mercury	63235-03-30 15:07	G	24817257.99	24817258.13	24817258.28	0.0066	0.0011	
Mercury	63235-06-26 15:50	G	24817346.02	24817346.16	24817346.31	0.0066	0.0001	
Mercury	63235-09-22 16:34	G	24817434.05	24817434.19	24817434.33	0.0066	0.0011	

Mercury	63235-12-19 17:02 G	24817522.08	24817522.21	24817522.35	0.0066	0.0022
Mercury	63236-03-16 17:31 G	24817610.12	24817610.23	24817610.37	0.0066	0.0033
Mercury	63236-06-12 18:14 G	24817698.16	24817698.26	24817698.38	0.0066	0.0044
Mercury	63236-09-08 19:12 G	24817786.22	24817786.30	24817786.38	0.0066	0.0055
Mercury	63236-12-05 19:41 G	24817874.31	24817874.32	24817874.34	0.0067	0.0066
Mars	63240-06-17 02:24 G	24819163.30	24819163.60	24819163.95	0.0068	0.0019
Venus	63317-07-10 12:14 G	24847309.90	24847310.01	24847310.16	0.0081	0.0066
Venus	63318-02-20 23:17 G	24847535.26	24847535.47	24847535.70	0.0080	0.0006
Venus	63318-10-04 09:36 G	24847760.84	24847760.90	24847760.99	0.0080	0.0075
Moon	63320-11-05 03:36 G	24848523.58	24848523.65	24848523.76	0.0079	0.0073
Earth	63320-11-05 04:34 G	24848523.66	24848523.69	24848523.77	0.0079	0.0077 *
Mercury	63322-01-15 19:26 G	24848960.27	24848960.31	24848960.39	0.0078	0.0073
Mercury	63322-04-13 21:36 G	24849048.29	24849048.40	24849048.54	0.0078	0.0052
Mercury	63322-07-10 23:46 G	24849136.34	24849136.49	24849136.66	0.0078	0.0031
Mercury	63322-10-07 01:55 G	24849224.41	24849224.58	24849224.75	0.0078	0.0009
Mercury	63323-01-03 03:50 G	24849312.49	24849312.66	24849312.83	0.0078	0.0012
Mercury	63323-04-01 05:46 G	24849400.59	24849400.74	24849400.90	0.0077	0.0032
Mercury	63323-06-28 07:26 G	24849488.70	24849488.81	24849488.95	0.0077	0.0054
Mercury	63323-09-24 09:22 G	24849576.86	24849576.89	24849576.96	0.0077	0.0075
Venus	63475-12-09 08:39 G	24905169.74	24905169.86	24905170.04	0.0063	0.0047
Venus	63476-07-21 12:58 G	24905394.83	24905395.04	24905395.26	0.0063	0.0012
Venus	63477-03-03 16:48 G	24905620.01	24905620.20	24905620.42	0.0064	0.0023
Venus	63477-10-14 20:53 G	24905845.28	24905845.37	24905845.47	0.0064	0.0057
Moon	63481-05-07 01:41 G	24907145.32	24907145.57	24907145.81	0.0065	0.0017
Earth	63481-05-07 04:48 G	24907145.46	24907145.70	24907145.96	0.0065	0.0018 *
Mercury	63482-05-10 18:29 G	24907514.25	24907514.27	24907514.33	0.0065	0.0064
Mercury	63482-08-06 19:27 G	24907602.23	24907602.31	24907602.40	0.0065	0.0053
Mercury	63482-11-02 20:10 G	24907690.23	24907690.34	24907690.46	0.0066	0.0042
Mercury	63483-01-29 20:53 G	24907778.24	24907778.37	24907778.50	0.0066	0.0031
Mercury	63483-04-27 21:22 G	24907866.26	24907866.39	24907866.54	0.0066	0.0021

Mercury	63483-07-24 22:05 G	24907954.28	24907954.42	24907954.57	0.0066	0.0010
Mercury	63483-10-20 23:03 G	24908042.31	24908042.46	24908042.60	0.0066	0.0002
Mercury	63484-01-16 23:31 G	24908130.34	24908130.48	24908130.63	0.0066	0.0012
Mercury	63484-04-14 00:00 G	24908218.37	24908218.50	24908218.65	0.0066	0.0023
Mercury	63484-07-11 00:58 G	24908306.41	24908306.54	24908306.66	0.0066	0.0034
Mercury	63484-10-07 01:27 G	24908394.46	24908394.56	24908394.67	0.0066	0.0045
Mercury	63485-01-03 02:10 G	24908482.52	24908482.59	24908482.67	0.0066	0.0056
Mars	63488-09-25 14:10 G	24909843.87	24909844.09	24909844.38	0.0068	0.0045
Venus	63566-01-25 19:41 G	24938089.17	24938089.32	24938089.50	0.0081	0.0055
Venus	63566-09-08 06:43 G	24938314.57	24938314.78	24938315.00	0.0080	0.0016
Earth	63569-11-10 04:34 G	24939473.47	24939473.69	24939473.91	0.0078	0.0042
Moon	63569-11-10 06:29 G	24939473.56	24939473.77	24939473.98	0.0078	0.0042 *
Mercury	63570-05-12 01:12 G	24939656.52	24939656.55	24939656.64	0.0078	0.0074
Mercury	63570-08-08 03:51 G	24939744.53	24939744.66	24939744.79	0.0078	0.0051
Mercury	63570-11-04 05:46 G	24939832.58	24939832.74	24939832.90	0.0078	0.0030
Mercury	63571-01-31 07:41 G	24939920.65	24939920.82	24939920.99	0.0078	0.0009
Mercury	63571-04-29 09:36 G	24940008.73	24940008.90	24940009.08	0.0078	0.0012
Mercury	63571-07-26 11:31 G	24940096.83	24940096.98	24940097.14	0.0078	0.0033
Mercury	63571-10-22 13:27 G	24940184.95	24940185.06	24940185.19	0.0077	0.0054
Mercury	63572-01-18 15:07 G	24940273.11	24940273.13	24940273.20	0.0077	0.0075
Venus	63724-06-25 12:15 G	24995948.89	24995949.01	24995949.17	0.0063	0.0049
Venus	63725-02-05 16:34 G	24996173.98	24996174.19	24996174.41	0.0063	0.0014
Venus	63725-09-18 20:24 G	24996399.14	24996399.35	24996399.56	0.0064	0.0020
Venus	63726-05-01 23:46 G	24996624.40	24996624.49	24996624.63	0.0064	0.0055
Earth	63729-05-10 03:22 G	24997728.55	24997728.64	24997728.77	0.0065	0.0058
Moon	63729-05-10 05:46 G	24997728.67	24997728.74	24997728.84	0.0065	0.0061 *
Moon	63730-05-11 15:07 G	24998094.94	24998095.13	24998095.31	0.0065	0.0043
Earth	63730-05-11 15:36 G	24998094.96	24998095.15	24998095.37	0.0065	0.0040 *
Mercury	63730-12-01 01:55 G	24998298.51	24998298.58	24998298.66	0.0065	0.0056
Mercury	63731-02-27 02:53 G	24998386.51	24998386.62	24998386.72	0.0065	0.0045

Mercury	63731-05-26 03:07 G	24998474.52	24998474.63	24998474.77	0.0066	0.0035
Mercury	63731-08-22 03:51 G	24998562.53	24998562.66	24998562.81	0.0066	0.0024
Mercury	63731-11-18 04:48 G	24998650.55	24998650.70	24998650.84	0.0066	0.0013
Mercury	63732-02-14 05:17 G	24998738.58	24998738.72	24998738.87	0.0066	0.0003
Mercury	63732-05-12 06:00 G	24998826.61	24998826.75	24998826.90	0.0066	0.0009
Mercury	63732-08-08 06:43 G	24998914.64	24998914.78	24998914.92	0.0066	0.0019
Mercury	63732-11-04 07:12 G	24999002.68	24999002.80	24999002.94	0.0066	0.0031
Mercury	63733-01-31 07:55 G	24999090.72	24999090.83	24999090.95	0.0066	0.0041
Mercury	63733-04-29 08:24 G	24999178.78	24999178.85	24999178.95	0.0066	0.0053
Mercury	63733-07-26 09:07 G	24999266.85	24999266.88	24999266.93	0.0066	0.0063
Venus	63814-08-12 23:03 G	25028868.33	25028868.46	25028868.64	0.0081	0.0059
Venus	63815-03-26 10:05 G	25029093.71	25029093.92	25029094.15	0.0080	0.0013
Moon	63817-11-12 15:07 G	25030055.91	25030056.13	25030056.38	0.0079	0.0035
Earth	63817-11-12 18:15 G	25030056.04	25030056.26	25030056.49	0.0079	0.0039 *
Mercury	63818-12-02 07:55 G	25030440.74	25030440.83	25030440.95	0.0078	0.0063
Mercury	63819-02-28 10:05 G	25030528.78	25030528.92	25030529.07	0.0078	0.0041
Mercury	63819-05-27 12:00 G	25030616.84	25030617.00	25030617.17	0.0078	0.0020
Mercury	63819-08-23 14:10 G	25030704.92	25030705.09	25030705.26	0.0078	0.0001
Mercury	63819-11-19 16:05 G	25030793.01	25030793.17	25030793.34	0.0078	0.0022
Mercury	63820-02-15 18:00 G	25030881.11	25030881.25	25030881.40	0.0077	0.0043
Mercury	63820-05-13 19:41 G	25030969.24	25030969.32	25030969.43	0.0077	0.0064
Venus	63973-01-10 15:51 G	25086728.04	25086728.16	25086728.30	0.0063	0.0051
Venus	63973-08-23 19:55 G	25086953.12	25086953.33	25086953.54	0.0063	0.0017
Venus	63974-04-05 23:31 G	25087178.28	25087178.48	25087178.71	0.0064	0.0018
Venus	63974-11-17 03:07 G	25087403.53	25087403.63	25087403.78	0.0064	0.0053
Moon	63978-05-14 13:41 G	25088677.80	25088678.07	25088678.34	0.0065	0.0000
Earth	63978-05-14 14:53 G	25088677.86	25088678.12	25088678.38	0.0065	0.0000 *
Mercury	63979-03-27 08:24 G	25088994.80	25088994.85	25088994.92	0.0065	0.0058
Mercury	63979-06-23 09:07 G	25089082.79	25089082.88	25089082.99	0.0065	0.0048
Mercury	63979-09-19 09:36 G	25089170.80	25089170.90	25089171.04	0.0066	0.0038

Mercury	63979-12-16 10:19 G	25089258.81	25089258.93	25089259.08	0.0066	0.0027
Mercury	63980-03-13 11:17 G	25089346.83	25089346.97	25089347.11	0.0066	0.0016
Mercury	63980-06-09 12:00 G	25089434.85	25089435.00	25089435.14	0.0066	0.0005
Mercury	63980-09-05 12:29 G	25089522.88	25089523.02	25089523.17	0.0066	0.0006
Mercury	63980-12-02 13:12 G	25089610.91	25089611.05	25089611.20	0.0066	0.0017
Mercury	63981-02-28 13:41 G	25089698.95	25089699.07	25089699.21	0.0066	0.0028
Mercury	63981-05-27 14:39 G	25089786.99	25089787.11	25089787.23	0.0066	0.0039
Mercury	63981-08-23 15:07 G	25089875.04	25089875.13	25089875.23	0.0066	0.0050
Mercury	63981-11-19 15:36 G	25089963.11	25089963.15	25089963.22	0.0066	0.0061

# 65TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 65th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	64063-02-27 04:19 G	25119647.54	25119647.68	25119647.85	0.0080	0.0057		
Venus	64063-10-10 15:22 G	25119872.92	25119873.14	25119873.35	0.0080	0.0014		
Moon	64066-11-16 10:19 G	25121005.82	25121005.93	25121006.10	0.0078	0.0067		
Earth	64066-11-16 13:55 G	25121005.95	25121006.08	25121006.23	0.0078	0.0066	*	
Mercury	64067-03-27 12:58 G	25121136.98	25121137.04	25121137.13	0.0078	0.0069		
Mercury	64067-06-23 14:53 G	25121225.00	25121225.12	25121225.27	0.0078	0.0048		
Mercury	64067-09-19 17:03 G	25121313.06	25121313.21	25121313.38	0.0078	0.0027		
Mercury	64067-12-16 19:12 G	25121401.13	25121401.30	25121401.47	0.0078	0.0006		
Mercury	64068-03-13 20:53 G	25121489.21	25121489.37	25121489.55	0.0078	0.0016		



Mercury	64068-06-09 22:48 G	25121577.31	25121577.45	25121577.61	0.0078	0.0037
Mercury	64068-09-06 00:29 G	25121665.43	25121665.52	25121665.66	0.0077	0.0058
Venus	64221-07-28 17:31 G	25177507.16	25177507.23	25177507.35	0.0063	0.0057
Venus	64222-03-10 21:51 G	25177732.21	25177732.41	25177732.62	0.0063	0.0023
Venus	64222-10-22 01:55 G	25177957.36	25177957.58	25177957.80	0.0064	0.0011
Venus	64223-06-04 05:17 G	25178182.59	25178182.72	25178182.90	0.0064	0.0046
Earth	64226-05-17 10:48 G	25179260.80	25179260.95	25179261.16	0.0065	0.0047
Moon	64226-05-17 13:12 G	25179260.91	25179261.05	25179261.23	0.0065	0.0050 *
Moon	64227-05-18 19:41 G	25179627.19	25179627.32	25179627.48	0.0065	0.0055
Earth	64227-05-18 22:48 G	25179627.32	25179627.45	25179627.64	0.0065	0.0051 *
Mercury	64227-07-21 14:39 G	25179691.10	25179691.11	25179691.13	0.0065	0.0065
Mercury	64227-10-17 14:53 G	25179779.06	25179779.12	25179779.22	0.0065	0.0055
Mercury	64228-01-13 15:51 G	25179867.06	25179867.16	25179867.28	0.0065	0.0044
Mercury	64228-04-10 16:34 G	25179955.07	25179955.19	25179955.32	0.0066	0.0033
Mercury	64228-07-07 17:03 G	25180043.09	25180043.21	25180043.36	0.0066	0.0023
Mercury	64228-10-03 18:00 G	25180131.11	25180131.25	25180131.40	0.0066	0.0011
Mercury	64228-12-30 18:43 G	25180219.13	25180219.28	25180219.42	0.0066	0.0001
Mercury	64229-03-28 19:27 G	25180307.16	25180307.31	25180307.45	0.0066	0.0010
Mercury	64229-06-24 19:55 G	25180395.20	25180395.33	25180395.47	0.0066	0.0021
Mercury	64229-09-20 20:24 G	25180483.24	25180483.35	25180483.49	0.0066	0.0032
Mercury	64229-12-17 21:07 G	25180571.28	25180571.38	25180571.50	0.0066	0.0043
Mercury	64230-03-15 21:36 G	25180659.34	25180659.40	25180659.50	0.0066	0.0054
Mercury	64230-06-11 22:48 G	25180747.42	25180747.45	25180747.47	0.0066	0.0065
Venus	64311-09-15 05:46 G	25210426.64	25210426.74	25210426.87	0.0081	0.0069
Venus	64312-04-27 16:48 G	25210651.98	25210652.20	25210652.42	0.0080	0.0002
Venus	64312-12-09 02:39 G	25210877.53	25210877.61	25210877.73	0.0080	0.0071
Earth	64314-11-20 00:15 G	25211588.29	25211588.51	25211588.78	0.0079	0.0028
Moon	64314-11-20 03:22 G	25211588.39	25211588.64	25211588.90	0.0079	0.0023 *
Mercury	64315-10-18 18:58 G	25211921.20	25211921.29	25211921.38	0.0078	0.0065
Mercury	64316-01-14 20:53 G	25212009.23	25212009.37	25212009.51	0.0078	0.0044

Mercury	64316-04-11 22:34 G	25212097.29	25212097.44	25212097.62	0.0078	0.0023
Mercury	64316-07-09 00:43 G	25212185.36	25212185.53	25212185.70	0.0078	0.0002
Mercury	64316-10-05 02:39 G	25212273.45	25212273.61	25212273.78	0.0078	0.0020
Mercury	64317-01-01 04:19 G	25212361.55	25212361.68	25212361.84	0.0078	0.0041
Mercury	64317-03-30 06:15 G	25212449.67	25212449.76	25212449.88	0.0077	0.0061
Mars	64320-12-26 20:39 G	25213817.10	25213817.36	25213817.66	0.0075	0.0025
Venus	64470-02-11 20:10 G	25268286.33	25268286.34	25268286.41	0.0063	0.0062
Venus	64470-09-25 00:15 G	25268511.33	25268511.51	25268511.72	0.0063	0.0029
Venus	64471-05-08 04:34 G	25268736.47	25268736.69	25268736.91	0.0064	0.0006
Venus	64471-12-19 07:55 G	25268961.68	25268961.83	25268962.02	0.0064	0.0041
Earth	64475-05-20 21:07 G	25270210.12	25270210.38	25270210.63	0.0065	0.0007
Moon	64475-05-21 00:15 G	25270210.27	25270210.51	25270210.78	0.0065	0.0007 *
Mercury	64476-02-09 21:22 G	25270475.34	25270475.39	25270475.46	0.0065	0.0059
Mercury	64476-05-07 21:51 G	25270563.33	25270563.41	25270563.53	0.0065	0.0049
Mercury	64476-08-03 22:48 G	25270651.34	25270651.45	25270651.58	0.0065	0.0037
Mercury	64476-10-30 23:31 G	25270739.35	25270739.48	25270739.62	0.0066	0.0027
Mercury	64477-01-27 00:15 G	25270827.37	25270827.51	25270827.65	0.0066	0.0016
Mercury	64477-04-25 00:58 G	25270915.39	25270915.54	25270915.69	0.0066	0.0005
Mercury	64477-07-22 01:27 G	25271003.42	25271003.56	25271003.71	0.0066	0.0006
Mercury	64477-10-18 02:10 G	25271091.45	25271091.59	25271091.74	0.0066	0.0016
Mercury	64478-01-14 02:53 G	25271179.49	25271179.62	25271179.76	0.0066	0.0027
Mercury	64478-04-12 03:22 G	25271267.53	25271267.64	25271267.77	0.0066	0.0038
Mercury	64478-07-09 04:05 G	25271355.58	25271355.67	25271355.78	0.0066	0.0049
Mercury	64478-10-05 04:34 G	25271443.65	25271443.69	25271443.77	0.0066	0.0061
Venus	64560-03-31 09:22 G	25301205.81	25301205.89	25301205.99	0.0080	0.0073
Venus	64560-11-11 20:10 G	25301431.12	25301431.34	25301431.56	0.0080	0.0003
Venus	64561-06-25 06:29 G	25301656.66	25301656.77	25301656.90	0.0080	0.0066
Moon	64563-11-23 16:48 G	25302538.10	25302538.20	25302538.35	0.0078	0.0070
Earth	64563-11-23 18:00 G	25302538.14	25302538.25	25302538.38	0.0078	0.0069 *
Mercury	64564-02-10 23:17 G	25302617.44	25302617.47	25302617.52	0.0078	0.0076

Mercury	64564-05-09 01:12 G	25302705.44	25302705.55	25302705.68	0.0078	0.0055
Mercury	64564-08-05 03:22 G	25302793.49	25302793.64	25302793.80	0.0078	0.0033
Mercury	64564-11-01 05:17 G	25302881.55	25302881.72	25302881.89	0.0078	0.0012
Mercury	64565-01-28 07:12 G	25302969.63	25302969.80	25302969.97	0.0078	0.0009
Mercury	64565-04-26 08:53 G	25303057.72	25303057.87	25303058.04	0.0078	0.0030
Mercury	64565-07-23 10:48 G	25303145.83	25303145.95	25303146.09	0.0078	0.0051
Mercury	64565-10-19 12:29 G	25303233.98	25303234.02	25303234.11	0.0077	0.0072
Mars	64569-04-05 21:51 G	25304498.15	25304498.41	25304498.71	0.0076	0.0026
Venus	64719-04-13 01:55 G	25359290.41	25359290.58	25359290.77	0.0063	0.0037
Venus	64719-11-24 06:00 G	25359515.53	25359515.75	25359515.97	0.0063	0.0003
Venus	64720-07-06 09:36 G	25359740.72	25359740.90	25359741.10	0.0064	0.0032
Moon	64723-05-24 13:27 G	25360792.91	25360793.06	25360793.27	0.0065	0.0046
Earth	64723-05-24 16:48 G	25360793.02	25360793.20	25360793.41	0.0065	0.0042 *
Earth	64724-05-25 04:34 G	25361159.57	25361159.69	25361159.84	0.0065	0.0056
Moon	64724-05-25 05:17 G	25361159.65	25361159.72	25361159.87	0.0065	0.0059 *
Mercury	64724-09-02 04:05 G	25361259.60	25361259.67	25361259.75	0.0065	0.0055
Mercury	64724-11-29 04:34 G	25361347.60	25361347.69	25361347.81	0.0065	0.0045
Mercury	64725-02-25 05:17 G	25361435.60	25361435.72	25361435.85	0.0065	0.0034
Mercury	64725-05-24 06:00 G	25361523.62	25361523.75	25361523.89	0.0065	0.0024
Mercury	64725-08-20 06:43 G	25361611.64	25361611.78	25361611.93	0.0066	0.0013
Mercury	64725-11-16 07:27 G	25361699.67	25361699.81	25361699.96	0.0066	0.0002
Mercury	64726-02-12 08:10 G	25361787.69	25361787.84	25361787.99	0.0066	0.0009
Mercury	64726-05-11 08:39 G	25361875.73	25361875.86	25361876.01	0.0066	0.0020
Mercury	64726-08-07 09:22 G	25361963.77	25361963.89	25361964.03	0.0066	0.0030
Mercury	64726-11-03 10:05 G	25362051.81	25362051.92	25362052.04	0.0066	0.0041
Mercury	64727-01-30 10:34 G	25362139.86	25362139.94	25362140.04	0.0066	0.0052
Mercury	64727-04-28 11:17 G	25362227.94	25362227.97	25362228.02	0.0066	0.0063
Mars	64732-01-01 16:34 G	25363936.90	25363937.19	25363937.50	0.0068	0.0034
Venus	64809-05-29 20:39 G	25392210.16	25392210.36	25392210.59	0.0080	0.0018
Venus	64810-01-10 07:27 G	25392435.64	25392435.81	25392435.98	0.0080	0.0051

Earth	64811-11-26 03:22 G	25393120.42	25393120.64	25393120.90	0.0079	0.0029
Moon	64811-11-26 06:00 G	25393120.53	25393120.75	25393121.02	0.0079	0.0025 *
Mercury	64812-09-02 04:34 G	25393401.65	25393401.69	25393401.76	0.0078	0.0074
Mercury	64812-11-29 06:29 G	25393489.66	25393489.77	25393489.91	0.0078	0.0053
Mercury	64813-02-25 08:39 G	25393577.71	25393577.86	25393578.02	0.0078	0.0031
Mercury	64813-05-24 10:48 G	25393665.78	25393665.95	25393666.12	0.0078	0.0010
Mercury	64813-08-20 12:29 G	25393753.86	25393754.02	25393754.20	0.0078	0.0011
Mercury	64813-11-16 14:24 G	25393841.95	25393842.10	25393842.26	0.0078	0.0032
Mercury	64814-02-12 16:05 G	25393930.06	25393930.17	25393930.31	0.0078	0.0053
Mercury	64814-05-11 18:00 G	25394018.21	25394018.25	25394018.32	0.0077	0.0074
Venus	64967-10-28 04:19 G	25450069.53	25450069.68	25450069.87	0.0063	0.0042
Venus	64968-06-09 08:24 G	25450294.64	25450294.85	25450295.08	0.0064	0.0008
Venus	64969-01-20 12:29 G	25450519.82	25450520.02	25450520.22	0.0064	0.0027
Venus	64969-09-02 16:05 G	25450745.14	25450745.17	25450745.24	0.0064	0.0062
Earth	64972-05-27 02:39 G	25451742.37	25451742.61	25451742.87	0.0065	0.0013
Moon	64972-05-27 02:53 G	25451742.39	25451742.62	25451742.87	0.0065	0.0012 *
Mercury	64972-12-26 10:05 G	25451955.88	25451955.92	25451955.99	0.0065	0.0060
Mercury	64973-03-24 10:48 G	25452043.87	25452043.95	25452044.06	0.0065	0.0050
Mercury	64973-06-20 11:46 G	25452131.87	25452131.99	25452132.11	0.0065	0.0039
Mercury	64973-09-16 12:29 G	25452219.89	25452220.02	25452220.15	0.0065	0.0028
Mercury	64973-12-13 12:58 G	25452307.90	25452308.04	25452308.19	0.0066	0.0017
Mercury	64974-03-11 13:41 G	25452395.93	25452396.07	25452396.22	0.0066	0.0007
Mercury	64974-06-07 14:24 G	25452483.96	25452484.10	25452484.25	0.0066	0.0004
Mercury	64974-09-03 15:07 G	25452571.99	25452572.13	25452572.27	0.0066	0.0015
Mercury	64974-11-30 15:36 G	25452660.02	25452660.15	25452660.29	0.0066	0.0026
Mercury	64975-02-26 16:05 G	25452748.06	25452748.17	25452748.31	0.0066	0.0037
Mercury	64975-05-25 16:48 G	25452836.11	25452836.20	25452836.31	0.0066	0.0048
Mercury	64975-08-21 17:46 G	25452924.18	25452924.24	25452924.31	0.0066	0.0059
Mars	64980-04-09 17:03 G	25454616.89	25454617.21	25454617.57	0.0068	0.0010

# 66TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 66th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	65057-12-15 00:15	G	25482989.31	25482989.51	25482989.73	0.0080	0.0022	
Venus	65058-07-28 10:34	G	25483214.78	25483214.94	25483215.14	0.0080	0.0047	
Earth	65060-11-29 21:07	G	25484070.26	25484070.38	25484070.52	0.0079	0.0068	
Moon	65060-11-30 00:58	G	25484070.42	25484070.54	25484070.67	0.0079	0.0069	*
Mercury	65061-03-25 11:03	G	25484185.88	25484185.96	25484186.07	0.0078	0.0064	
Mercury	65061-06-21 12:58	G	25484273.91	25484274.04	25484274.20	0.0078	0.0043	
Mercury	65061-09-17 15:07	G	25484361.97	25484362.13	25484362.30	0.0078	0.0021	
Mercury	65061-12-14 17:17	G	25484450.05	25484450.22	25484450.39	0.0078	0.0002	
Mercury	65062-03-12 18:58	G	25484538.13	25484538.29	25484538.46	0.0078	0.0021	
Mercury	65062-06-08 20:53	G	25484626.23	25484626.37	25484626.52	0.0078	0.0042	
Mercury	65062-09-04 22:34	G	25484714.36	25484714.44	25484714.56	0.0078	0.0063	
Venus	65216-05-14 06:15	G	25540848.63	25540848.76	25540848.92	0.0063	0.0048	
Venus	65216-12-25 10:19	G	25541073.72	25541073.93	25541074.15	0.0063	0.0015	
Venus	65217-08-07 14:10	G	25541298.89	25541299.09	25541299.31	0.0064	0.0020	
Venus	65218-03-20 17:46	G	25541524.16	25541524.24	25541524.39	0.0064	0.0055	
Moon	65220-05-29 21:07	G	25542325.19	25542325.38	25542325.63	0.0065	0.0038	
Earth	65220-05-29 23:17	G	25542325.27	25542325.47	25542325.70	0.0065	0.0034	*
Earth	65221-05-31 11:03	G	25542691.92	25542691.96	25542692.03	0.0065	0.0063	
Mercury	65221-07-18 17:03	G	25542740.14	25542740.21	25542740.29	0.0065	0.0055	

Mercury	65221-10-14 17:31 G	25542828.14	25542828.23	25542828.35	0.0065	0.0045
Mercury	65222-01-10 18:15 G	25542916.14	25542916.26	25542916.39	0.0065	0.0035
Mercury	65222-04-08 18:58 G	25543004.16	25543004.29	25543004.43	0.0065	0.0024
Mercury	65222-07-05 19:41 G	25543092.18	25543092.32	25543092.47	0.0066	0.0013
Mercury	65222-10-01 20:24 G	25543180.21	25543180.35	25543180.50	0.0066	0.0003
Mercury	65222-12-28 21:07 G	25543268.24	25543268.38	25543268.53	0.0066	0.0009
Mercury	65223-03-26 21:36 G	25543356.27	25543356.40	25543356.55	0.0066	0.0020
Mercury	65223-06-22 22:19 G	25543444.31	25543444.43	25543444.57	0.0066	0.0030
Mercury	65223-09-18 23:03 G	25543532.35	25543532.46	25543532.58	0.0066	0.0041
Mercury	65223-12-15 23:31 G	25543620.41	25543620.48	25543620.58	0.0066	0.0052
Mercury	65224-03-13 00:15 G	25543708.48	25543708.51	25543708.56	0.0066	0.0063
Mars	65228-07-18 14:24 G	25545296.98	25545297.10	25545297.30	0.0068	0.0060
Venus	65306-07-02 02:10 G	25573768.39	25573768.59	25573768.79	0.0080	0.0034
Venus	65307-02-12 12:15 G	25573993.83	25573994.01	25573994.23	0.0080	0.0036
Moon	65308-12-02 06:00 G	25574652.51	25574652.75	25574653.00	0.0079	0.0020
Earth	65308-12-02 08:10 G	25574652.61	25574652.84	25574653.10	0.0079	0.0024 *
Mercury	65309-10-15 16:48 G	25574970.10	25574970.20	25574970.33	0.0078	0.0059
Mercury	65310-01-11 18:43 G	25575058.15	25575058.28	25575058.45	0.0078	0.0038
Mercury	65310-04-09 20:53 G	25575146.21	25575146.37	25575146.54	0.0078	0.0016
Mercury	65310-07-06 23:03 G	25575234.29	25575234.46	25575234.63	0.0078	0.0005
Mercury	65310-10-03 00:43 G	25575322.38	25575322.53	25575322.70	0.0078	0.0026
Mercury	65310-12-30 02:39 G	25575410.48	25575410.61	25575410.75	0.0078	0.0047
Mercury	65311-03-28 04:19 G	25575498.61	25575498.68	25575498.78	0.0078	0.0068
Venus	65464-11-29 09:51 G	25631627.80	25631627.91	25631628.06	0.0063	0.0050
Venus	65465-07-12 13:55 G	25631852.88	25631853.08	25631853.30	0.0064	0.0017
Venus	65466-02-22 18:00 G	25632078.05	25632078.25	25632078.47	0.0064	0.0018
Venus	65466-10-05 21:36 G	25632303.31	25632303.40	25632303.55	0.0064	0.0053
Moon	65469-06-03 06:58 G	25633274.57	25633274.79	25633275.05	0.0065	0.0025
Earth	65469-06-03 10:48 G	25633274.72	25633274.95	25633275.19	0.0065	0.0026 *
Mercury	65469-11-11 23:31 G	25633436.42	25633436.48	25633436.56	0.0065	0.0057

Mercury	65470-02-08 00:00 G	25633524.41	25633524.50	25633524.62	0.0065	0.0047
Mercury	65470-05-07 00:43 G	25633612.42	25633612.53	25633612.67	0.0065	0.0037
Mercury	65470-08-03 01:41 G	25633700.44	25633700.57	25633700.71	0.0065	0.0025
Mercury	65470-10-30 02:24 G	25633788.46	25633788.60	25633788.74	0.0065	0.0015
Mercury	65471-01-26 03:07 G	25633876.48	25633876.63	25633876.78	0.0066	0.0004
Mercury	65471-04-24 03:36 G	25633964.51	25633964.65	25633964.80	0.0066	0.0007
Mercury	65471-07-21 04:19 G	25634052.54	25634052.68	25634052.83	0.0066	0.0018
Mercury	65471-10-17 04:48 G	25634140.58	25634140.70	25634140.84	0.0066	0.0029
Mercury	65472-01-13 05:46 G	25634228.62	25634228.74	25634228.86	0.0066	0.0039
Mercury	65472-04-10 06:15 G	25634316.67	25634316.76	25634316.86	0.0066	0.0050
Mercury	65472-07-07 06:43 G	25634404.74	25634404.78	25634404.85	0.0066	0.0062
Venus	65555-01-17 06:58 G	25664547.59	25664547.79	25664547.99	0.0080	0.0032
Venus	65555-08-30 17:31 G	25664773.04	25664773.23	25664773.43	0.0080	0.0036
Mercury	65558-02-08 22:05 G	25665666.34	25665666.42	25665666.52	0.0078	0.0065
Mercury	65558-05-08 00:00 G	25665754.37	25665754.50	25665754.65	0.0078	0.0044
Mercury	65558-08-04 02:10 G	25665842.43	25665842.59	25665842.75	0.0078	0.0022
Mercury	65558-10-31 04:05 G	25665930.50	25665930.67	25665930.84	0.0078	0.0002
Mercury	65559-01-27 05:46 G	25666018.58	25666018.74	25666018.91	0.0078	0.0020
Mercury	65559-04-25 07:27 G	25666106.68	25666106.81	25666106.97	0.0078	0.0041
Mercury	65559-07-22 09:51 G	25666194.80	25666194.91	25666195.01	0.0078	0.0061
Venus	65713-06-16 12:58 G	25722406.94	25722407.04	25722407.17	0.0063	0.0054
Venus	65714-01-27 17:03 G	25722632.01	25722632.21	25722632.43	0.0064	0.0020
Venus	65714-09-09 20:53 G	25722857.17	25722857.37	25722857.60	0.0064	0.0015
Venus	65715-04-23 01:12 G	25723082.42	25723082.55	25723082.70	0.0064	0.0049
Earth	65717-06-06 09:22 G	25723857.65	25723857.89	25723858.15	0.0065	0.0014
Moon	65717-06-06 12:43 G	25723857.78	25723858.03	25723858.29	0.0065	0.0017 *
Mercury	65718-03-08 06:00 G	25724132.70	25724132.75	25724132.81	0.0065	0.0060
Mercury	65718-06-04 06:29 G	25724220.69	25724220.77	25724220.88	0.0065	0.0050
Mercury	65718-08-31 07:12 G	25724308.69	25724308.80	25724308.93	0.0065	0.0039
Mercury	65718-11-27 08:10 G	25724396.71	25724396.84	25724396.97	0.0065	0.0029

Mercury	65719-02-23 08:39 G	25724484.72	25724484.86	25724485.01	0.0065	0.0018
Mercury	65719-05-22 09:22 G	25724572.75	25724572.89	25724573.04	0.0065	0.0007
Mercury	65719-08-18 10:05 G	25724660.77	25724660.92	25724661.07	0.0066	0.0004
Mercury	65719-11-14 10:34 G	25724748.81	25724748.94	25724749.09	0.0066	0.0015
Mercury	65720-02-10 11:31 G	25724836.84	25724836.98	25724837.12	0.0066	0.0025
Mercury	65720-05-08 12:00 G	25724924.89	25724925.00	25724925.13	0.0066	0.0036
Mercury	65720-08-04 12:29 G	25725012.93	25725013.02	25725013.14	0.0066	0.0047
Mercury	65720-10-31 13:12 G	25725101.00	25725101.05	25725101.13	0.0066	0.0058
Venus	65803-08-04 11:03 G	25755326.77	25755326.96	25755327.17	0.0080	0.0035
Venus	65804-03-16 21:51 G	25755552.21	25755552.41	25755552.61	0.0080	0.0034
Moon	65805-12-09 16:34 G	25756184.93	25756185.19	25756185.46	0.0079	0.0009
Earth	65805-12-09 18:58 G	25756185.04	25756185.29	25756185.56	0.0079	0.0006 *
Mercury	65806-06-05 02:39 G	25756362.57	25756362.61	25756362.69	0.0079	0.0074
Mercury	65806-09-01 04:48 G	25756450.59	25756450.70	25756450.84	0.0078	0.0052
Mercury	65806-11-28 06:43 G	25756538.64	25756538.78	25756538.95	0.0078	0.0031
Mercury	65807-02-24 08:53 G	25756626.70	25756626.87	25756627.04	0.0078	0.0010
Mercury	65807-05-23 10:48 G	25756714.78	25756714.95	25756715.12	0.0078	0.0011
Mercury	65807-08-19 12:29 G	25756802.88	25756803.02	25756803.19	0.0078	0.0032
Mercury	65807-11-15 14:24 G	25756890.99	25756891.10	25756891.23	0.0078	0.0053
Mercury	65808-02-11 16:05 G	25756979.14	25756979.17	25756979.24	0.0078	0.0074
Venus	65962-01-01 18:29 G	25813186.14	25813186.27	25813186.40	0.0063	0.0051
Venus	65962-08-14 22:19 G	25813411.22	25813411.43	25813411.65	0.0064	0.0017
Venus	65963-03-28 02:24 G	25813636.40	25813636.60	25813636.82	0.0064	0.0018
Venus	65963-11-08 06:29 G	25813861.65	25813861.77	25813861.91	0.0064	0.0052
Moon	65965-06-09 09:22 G	25814440.71	25814440.89	25814441.09	0.0065	0.0041
Earth	65965-06-09 11:46 G	25814440.81	25814440.99	25814441.20	0.0065	0.0042 *
Earth	65966-06-10 23:17 G	25814807.35	25814807.47	25814807.62	0.0065	0.0055
Moon	65966-06-11 00:29 G	25814807.38	25814807.52	25814807.67	0.0065	0.0053 *
Mercury	65966-07-02 12:58 G	25814828.99	25814829.04	25814829.11	0.0065	0.0058
Mercury	65966-09-28 13:27 G	25814916.98	25814917.06	25814917.18	0.0065	0.0048



Mercury	65966-12-25 14:10 G	25815004.98	25815005.09	25815005.23	0.0065	0.0038
Mercury	65967-03-23 15:07 G	25815093.00	25815093.13	25815093.27	0.0065	0.0027
Mercury	65967-06-19 15:51 G	25815181.02	25815181.16	25815181.31	0.0065	0.0016
Mercury	65967-09-15 16:34 G	25815269.04	25815269.19	25815269.34	0.0065	0.0005
Mercury	65967-12-12 17:17 G	25815357.07	25815357.22	25815357.37	0.0066	0.0006
Mercury	65968-03-09 17:46 G	25815445.10	25815445.24	25815445.39	0.0066	0.0017
Mercury	65968-06-05 18:15 G	25815533.14	25815533.26	25815533.41	0.0066	0.0028
Mercury	65968-09-01 19:12 G	25815621.19	25815621.30	25815621.42	0.0066	0.0038
Mercury	65968-11-28 19:55 G	25815709.24	25815709.33	25815709.43	0.0066	0.0049
Mercury	65969-02-24 20:24 G	25815797.30	25815797.35	25815797.42	0.0066	0.0060

# 67TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 67th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	66052-02-18 18:15 G	25846106.06	25846106.26	25846106.48	0.0080	0.0024		
Venus	66052-10-01 04:48 G	25846331.53	25846331.70	25846331.90	0.0080	0.0045		
Earth	66053-12-11 14:10 G	25846767.91	25846768.09	25846768.30	0.0079	0.0052		
Moon	66053-12-11 17:17 G	25846768.05	25846768.22	25846768.42	0.0079	0.0054 *		
Mercury	66054-09-28 08:39 G	25847058.82	25847058.86	25847058.95	0.0079	0.0073		
Mercury	66054-12-25 10:48 G	25847146.84	25847146.95	25847147.09	0.0078	0.0051		
Mercury	66055-03-23 12:43 G	25847234.89	25847235.03	25847235.20	0.0078	0.0031		
Mercury	66055-06-19 14:53 G	25847322.96	25847323.12	25847323.29	0.0078	0.0009		

Mercury	66055-09-15 16:48 G	25847411.03	25847411.20	25847411.37	0.0078	0.0012
Mercury	66055-12-12 18:29 G	25847499.13	25847499.27	25847499.43	0.0078	0.0033
Mercury	66056-03-09 20:24 G	25847587.24	25847587.35	25847587.48	0.0078	0.0054
Mercury	66056-06-05 22:05 G	25847675.39	25847675.42	25847675.48	0.0078	0.0075
Mars	66060-10-24 18:58 G	25849277.29	25849277.29	25849277.34	0.0075	0.0075
Venus	66210-07-19 23:17 G	25903965.34	25903965.47	25903965.61	0.0063	0.0049
Venus	66211-03-02 03:22 G	25904190.43	25904190.64	25904190.86	0.0064	0.0015
Venus	66211-10-13 06:58 G	25904415.60	25904415.79	25904416.02	0.0064	0.0020
Venus	66212-05-25 11:17 G	25904640.87	25904640.97	25904641.09	0.0064	0.0054
Earth	66214-06-14 00:43 G	25905390.31	25905390.53	25905390.78	0.0065	0.0025
Moon	66214-06-14 01:41 G	25905390.36	25905390.57	25905390.82	0.0065	0.0023 *
Mercury	66214-10-26 19:55 G	25905525.27	25905525.33	25905525.40	0.0065	0.0057
Mercury	66215-01-22 20:24 G	25905613.26	25905613.35	25905613.47	0.0065	0.0047
Mercury	66215-04-20 21:07 G	25905701.27	25905701.38	25905701.52	0.0065	0.0036
Mercury	66215-07-17 22:05 G	25905789.28	25905789.42	25905789.56	0.0065	0.0025
Mercury	66215-10-13 22:48 G	25905877.30	25905877.45	25905877.59	0.0065	0.0015
Mercury	66216-01-09 23:31 G	25905965.33	25905965.48	25905965.63	0.0065	0.0004
Mercury	66216-04-07 00:15 G	25906053.36	25906053.51	25906053.65	0.0066	0.0007
Mercury	66216-07-04 00:43 G	25906141.39	25906141.53	25906141.68	0.0066	0.0018
Mercury	66216-09-30 01:12 G	25906229.43	25906229.55	25906229.70	0.0066	0.0029
Mercury	66216-12-27 01:55 G	25906317.48	25906317.58	25906317.71	0.0066	0.0040
Mercury	66217-03-25 02:53 G	25906405.53	25906405.62	25906405.72	0.0066	0.0050
Mercury	66217-06-21 03:36 G	25906493.60	25906493.65	25906493.70	0.0066	0.0061
Venus	66300-09-06 01:41 G	25936885.37	25936885.57	25936885.80	0.0080	0.0014
Venus	66301-04-19 12:00 G	25937110.86	25937111.00	25937111.18	0.0080	0.0055
Earth	66302-12-17 14:10 G	25937718.00	25937718.09	25937718.22	0.0079	0.0071
Moon	66302-12-17 17:03 G	25937718.16	25937718.21	25937718.33	0.0079	0.0075 *
Mercury	66303-01-23 15:07 G	25937755.07	25937755.13	25937755.21	0.0079	0.0071
Mercury	66303-04-21 17:03 G	25937843.09	25937843.21	25937843.35	0.0079	0.0050
Mercury	66303-07-18 18:58 G	25937931.14	25937931.29	25937931.46	0.0078	0.0029

Mercury	66303-10-14 21:07 G	25938019.21	25938019.38	25938019.55	0.0078	0.0008
Mercury	66304-01-10 23:03 G	25938107.29	25938107.46	25938107.62	0.0078	0.0014
Mercury	66304-04-08 00:43 G	25938195.38	25938195.53	25938195.69	0.0078	0.0034
Mercury	66304-07-05 02:39 G	25938283.50	25938283.61	25938283.73	0.0078	0.0055
Mercury	66304-10-01 04:19 G	25938371.66	25938371.68	25938371.73	0.0078	0.0076
Mars	66309-02-04 06:15 G	25939958.60	25939958.76	25939958.97	0.0075	0.0059
Venus	66459-02-03 06:00 G	25994744.60	25994744.75	25994744.94	0.0064	0.0041
Venus	66459-09-16 10:19 G	25994969.71	25994969.93	25994970.15	0.0064	0.0007
Venus	66460-04-28 14:10 G	25995194.91	25995195.09	25995195.30	0.0064	0.0028
Venus	66460-12-09 18:00 G	25995420.24	25995420.25	25995420.31	0.0064	0.0064
Moon	66462-06-16 04:05 G	25995973.42	25995973.67	25995973.95	0.0065	0.0008
Earth	66462-06-16 06:15 G	25995973.51	25995973.76	25995974.02	0.0065	0.0006 *
Mercury	66462-11-23 03:07 G	25996133.58	25996133.63	25996133.67	0.0065	0.0061
Mercury	66463-02-19 03:22 G	25996221.56	25996221.64	25996221.75	0.0065	0.0051
Mercury	66463-05-18 04:05 G	25996309.57	25996309.67	25996309.80	0.0065	0.0041
Mercury	66463-08-14 05:03 G	25996397.58	25996397.71	25996397.84	0.0065	0.0030
Mercury	66463-11-10 05:31 G	25996485.60	25996485.73	25996485.88	0.0065	0.0019
Mercury	66464-02-06 06:29 G	25996573.62	25996573.77	25996573.92	0.0065	0.0008
Mercury	66464-05-04 07:12 G	25996661.65	25996661.80	25996661.95	0.0065	0.0003
Mercury	66464-07-31 07:41 G	25996749.68	25996749.82	25996749.97	0.0066	0.0014
Mercury	66464-10-27 08:24 G	25996837.72	25996837.85	25996837.99	0.0066	0.0024
Mercury	66465-01-23 09:07 G	25996925.76	25996925.88	25996926.01	0.0066	0.0035
Mercury	66465-04-21 09:51 G	25997013.81	25997013.91	25997014.02	0.0066	0.0046
Mercury	66465-07-18 10:19 G	25997101.87	25997101.93	25997102.01	0.0066	0.0057
Venus	66548-08-10 01:27 G	26027439.42	26027439.56	26027439.70	0.0080	0.0061
Venus	66549-03-23 12:00 G	26027664.78	26027665.00	26027665.22	0.0080	0.0008
Venus	66549-11-03 22:05 G	26027890.37	26027890.42	26027890.51	0.0079	0.0076
Moon	66550-12-19 12:00 G	26028300.77	26028301.00	26028301.24	0.0079	0.0029
Earth	66550-12-19 14:10 G	26028300.87	26028301.09	26028301.35	0.0079	0.0032 *
Mercury	66551-05-18 22:34 G	26028451.33	26028451.44	26028451.54	0.0079	0.0061

Mercury	66551-08-15 00:29 G	26028539.37	26028539.52	26028539.66	0.0079	0.0040
Mercury	66551-11-11 02:10 G	26028627.43	26028627.59	26028627.76	0.0078	0.0019
Mercury	66552-02-07 04:05 G	26028715.51	26028715.67	26028715.84	0.0078	0.0003
Mercury	66552-05-05 06:00 G	26028803.59	26028803.75	26028803.91	0.0078	0.0023
Mercury	66552-08-01 07:41 G	26028891.69	26028891.82	26028891.97	0.0078	0.0044
Mercury	66552-10-28 09:22 G	26028979.82	26028979.89	26028980.00	0.0078	0.0065
Mars	66557-05-15 23:46 G	26030640.33	26030640.49	26030640.67	0.0075	0.0061
Venus	66707-08-22 12:29 G	26085523.86	26085524.02	26085524.24	0.0064	0.0034
Venus	66708-04-03 17:17 G	26085749.00	26085749.22	26085749.44	0.0064	0.0001
Venus	66708-11-14 20:53 G	26085974.20	26085974.37	26085974.57	0.0064	0.0036
Earth	66710-06-20 10:34 G	26086556.70	26086556.94	26086557.20	0.0065	0.0014
Moon	66710-06-20 13:55 G	26086556.83	26086557.08	26086557.33	0.0065	0.0011 *
Mercury	66711-03-20 10:05 G	26086829.86	26086829.92	26086830.01	0.0065	0.0056
Mercury	66711-06-16 11:03 G	26086917.86	26086917.96	26086918.07	0.0065	0.0045
Mercury	66711-09-12 11:46 G	26087005.87	26087005.99	26087006.12	0.0065	0.0035
Mercury	66711-12-09 12:15 G	26087093.88	26087094.01	26087094.16	0.0065	0.0024
Mercury	66712-03-06 13:12 G	26087181.91	26087182.05	26087182.20	0.0065	0.0013
Mercury	66712-06-02 13:55 G	26087269.93	26087270.08	26087270.23	0.0065	0.0002
Mercury	66712-08-29 14:39 G	26087357.96	26087358.11	26087358.26	0.0065	0.0008
Mercury	66712-11-25 15:07 G	26087446.00	26087446.13	26087446.28	0.0066	0.0020
Mercury	66713-02-21 15:36 G	26087534.04	26087534.15	26087534.30	0.0066	0.0031
Mercury	66713-05-20 16:34 G	26087622.08	26087622.19	26087622.31	0.0066	0.0041
Mercury	66713-08-16 17:17 G	26087710.14	26087710.22	26087710.32	0.0066	0.0052
Mercury	66713-11-12 17:46 G	26087798.22	26087798.24	26087798.30	0.0066	0.0063
Venus	66797-02-25 11:31 G	26118218.80	26118218.98	26118219.19	0.0080	0.0038
Venus	66797-10-08 22:19 G	26118444.24	26118444.43	26118444.65	0.0080	0.0031
Earth	66798-12-22 15:22 G	26118883.88	26118884.14	26118884.40	0.0079	0.0005
Moon	66798-12-22 16:19 G	26118883.91	26118884.18	26118884.45	0.0079	0.0008 *
Mercury	66799-06-16 03:51 G	26119059.59	26119059.66	26119059.73	0.0079	0.0071
Mercury	66799-09-12 05:46 G	26119147.61	26119147.74	26119147.87	0.0079	0.0050

Mercury	66799-12-09 07:41 G	26119235.67	26119235.82	26119235.98	0.0079	0.0029
Mercury	66800-03-06 09:36 G	26119323.73	26119323.90	26119324.07	0.0078	0.0008
Mercury	66800-06-02 11:17 G	26119411.81	26119411.97	26119412.14	0.0078	0.0014
Mercury	66800-08-29 13:12 G	26119499.91	26119500.05	26119500.21	0.0078	0.0034
Mercury	66800-11-25 14:53 G	26119588.02	26119588.12	26119588.25	0.0078	0.0055
Mercury	66801-02-21 16:48 G	26119676.18	26119676.20	26119676.25	0.0078	0.0076
Mars	66805-08-25 17:03 G	26121322.13	26121322.21	26121322.37	0.0075	0.0069
Venus	66955-07-26 17:17 G	26176078.13	26176078.22	26176078.36	0.0064	0.0054
Venus	66956-03-07 21:36 G	26176303.20	26176303.40	26176303.62	0.0064	0.0020
Venus	66956-10-19 01:55 G	26176528.37	26176528.58	26176528.80	0.0064	0.0015
Venus	66957-06-01 05:31 G	26176753.62	26176753.73	26176753.89	0.0064	0.0051
Moon	66958-06-22 14:53 G	26177139.90	26177140.12	26177140.38	0.0065	0.0024
Earth	66958-06-22 18:29 G	26177140.04	26177140.27	26177140.52	0.0065	0.0023 *
Mercury	66959-04-16 17:31 G	26177438.17	26177438.23	26177438.32	0.0065	0.0056
Mercury	66959-07-13 18:29 G	26177526.17	26177526.27	26177526.38	0.0065	0.0045
Mercury	66959-10-09 19:12 G	26177614.18	26177614.30	26177614.43	0.0065	0.0034
Mercury	66960-01-05 19:41 G	26177702.20	26177702.32	26177702.47	0.0065	0.0025
Mercury	66960-04-02 20:39 G	26177790.22	26177790.36	26177790.51	0.0065	0.0013
Mercury	66960-06-29 21:22 G	26177878.24	26177878.39	26177878.54	0.0065	0.0003
Mercury	66960-09-25 22:05 G	26177966.27	26177966.42	26177966.57	0.0065	0.0009
Mercury	66960-12-22 22:48 G	26178054.31	26178054.45	26178054.59	0.0066	0.0019
Mercury	66961-03-20 23:17 G	26178142.35	26178142.47	26178142.61	0.0066	0.0031
Mercury	66961-06-17 00:15 G	26178230.40	26178230.51	26178230.63	0.0066	0.0041
Mercury	66961-09-13 00:43 G	26178318.45	26178318.53	26178318.63	0.0066	0.0052
Mercury	66961-12-10 01:27 G	26178406.53	26178406.56	26178406.61	0.0066	0.0063

# 68TH MILLENNIUM CE

**This is a list of transits visible from Pluto in the 68th millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	67045-01-30 14:24	G	26208773.02	26208773.10	26208773.17	0.0080	0.0075	
Venus	67045-09-13 00:58	G	26208998.32	26208998.54	26208998.76	0.0080	0.0006	
Venus	67046-04-26 10:48	G	26209223.83	26209223.95	26209224.11	0.0080	0.0062	
Earth	67046-12-25 19:27	G	26209467.08	26209467.31	26209467.57	0.0079	0.0028	
Moon	67046-12-25 19:41	G	26209467.10	26209467.32	26209467.57	0.0079	0.0027	*
Mercury	67047-07-14 09:36	G	26209667.87	26209667.90	26209667.98	0.0079	0.0075	
Mercury	67047-10-10 11:46	G	26209755.88	26209755.99	26209756.13	0.0079	0.0054	
Mercury	67048-01-06 13:41	G	26209843.93	26209844.07	26209844.23	0.0079	0.0033	
Mercury	67048-04-03 15:36	G	26209931.99	26209932.15	26209932.33	0.0078	0.0012	
Mercury	67048-06-30 17:31	G	26210020.07	26210020.23	26210020.41	0.0078	0.0011	
Mercury	67048-09-26 19:27	G	26210108.16	26210108.31	26210108.47	0.0078	0.0031	
Mercury	67048-12-23 21:07	G	26210196.27	26210196.38	26210196.52	0.0078	0.0052	
Mercury	67049-03-21 23:17	G	26210284.41	26210284.47	26210284.53	0.0078	0.0072	
Venus	67204-02-11 02:24	G	26266857.44	26266857.60	26266857.79	0.0064	0.0040	
Venus	67204-09-23 06:29	G	26267082.56	26267082.77	26267083.00	0.0064	0.0006	
Venus	67205-05-06 10:34	G	26267307.76	26267307.94	26267308.15	0.0064	0.0030	
Earth	67206-06-26 02:10	G	26267723.38	26267723.59	26267723.83	0.0065	0.0032	
Moon	67206-06-26 05:31	G	26267723.54	26267723.73	26267723.97	0.0065	0.0036	*
Mercury	67207-05-15 00:58	G	26268046.48	26268046.54	26268046.63	0.0065	0.0056	
Mercury	67207-08-11 01:41	G	26268134.48	26268134.57	26268134.69	0.0065	0.0045	
Mercury	67207-11-07 02:39	G	26268222.49	26268222.61	26268222.74	0.0065	0.0034	
Mercury	67208-02-03 03:07	G	26268310.50	26268310.63	26268310.78	0.0065	0.0024	

Mercury	67208-05-01 04:05 G	26268398.53	26268398.67	26268398.82	0.0065	0.0013
Mercury	67208-07-28 04:48 G	26268486.55	26268486.70	26268486.85	0.0065	0.0002
Mercury	67208-10-24 05:31 G	26268574.58	26268574.73	26268574.88	0.0065	0.0009
Mercury	67209-01-20 06:15 G	26268662.62	26268662.76	26268662.90	0.0065	0.0020
Mercury	67209-04-18 06:43 G	26268750.66	26268750.78	26268750.92	0.0066	0.0031
Mercury	67209-07-15 07:27 G	26268838.71	26268838.81	26268838.94	0.0066	0.0042
Mercury	67209-10-11 08:24 G	26268926.76	26268926.85	26268926.94	0.0066	0.0052
Mercury	67210-01-07 09:07 G	26269014.84	26269014.88	26269014.92	0.0066	0.0063
Venus	67293-08-17 03:51 G	26299552.47	26299552.66	26299552.85	0.0080	0.0039
Venus	67294-03-30 14:10 G	26299777.89	26299778.09	26299778.31	0.0080	0.0029
Moon	67294-12-27 22:48 G	26300050.25	26300050.45	26300050.70	0.0079	0.0042
Earth	67294-12-28 00:58 G	26300050.34	26300050.54	26300050.77	0.0079	0.0046 *
Mercury	67295-08-10 16:34 G	26300276.15	26300276.19	26300276.25	0.0079	0.0075
Mercury	67295-11-06 18:29 G	26300364.16	26300364.27	26300364.40	0.0079	0.0054
Mercury	67296-02-02 20:24 G	26300452.21	26300452.35	26300452.51	0.0079	0.0033
Mercury	67296-04-30 22:19 G	26300540.27	26300540.43	26300540.60	0.0079	0.0012
Mercury	67296-07-28 00:15 G	26300628.35	26300628.51	26300628.68	0.0078	0.0010
Mercury	67296-10-24 02:10 G	26300716.44	26300716.59	26300716.74	0.0078	0.0030
Mercury	67297-01-20 03:51 G	26300804.54	26300804.66	26300804.79	0.0078	0.0051
Mercury	67297-04-18 05:31 G	26300892.69	26300892.73	26300892.81	0.0078	0.0072
Venus	67452-01-16 09:07 G	26357411.79	26357411.88	26357412.02	0.0064	0.0054
Venus	67452-08-28 13:27 G	26357636.86	26357637.06	26357637.28	0.0064	0.0019
Venus	67453-04-10 17:46 G	26357862.03	26357862.24	26357862.46	0.0064	0.0015
Venus	67453-11-21 21:36 G	26358087.28	26358087.40	26358087.55	0.0064	0.0051
Moon	67454-06-29 10:19 G	26358306.73	26358306.93	26358307.18	0.0065	0.0030
Earth	67454-06-29 13:41 G	26358306.86	26358307.07	26358307.31	0.0065	0.0029 *
Mercury	67455-03-16 08:24 G	26358566.82	26358566.85	26358566.92	0.0065	0.0061
Mercury	67455-06-12 09:22 G	26358654.80	26358654.89	26358654.99	0.0065	0.0050
Mercury	67455-09-08 09:51 G	26358742.81	26358742.91	26358743.04	0.0065	0.0040
Mercury	67455-12-05 10:34 G	26358830.82	26358830.94	26358831.09	0.0065	0.0029

Mercury	67456-03-02 11:31 G	26358918.84	26358918.98	26358919.13	0.0065	0.0018
Mercury	67456-05-29 12:15 G	26359006.86	26359007.01	26359007.16	0.0065	0.0007
Mercury	67456-08-25 12:58 G	26359094.89	26359095.04	26359095.19	0.0065	0.0003
Mercury	67456-11-21 13:41 G	26359182.93	26359183.07	26359183.22	0.0065	0.0014
Mercury	67457-02-17 14:10 G	26359270.96	26359271.09	26359271.24	0.0065	0.0025
Mercury	67457-05-16 15:07 G	26359359.01	26359359.13	26359359.25	0.0066	0.0036
Mercury	67457-08-12 15:36 G	26359447.06	26359447.15	26359447.26	0.0066	0.0047
Mercury	67457-11-08 16:19 G	26359535.12	26359535.18	26359535.26	0.0066	0.0058
Venus	67541-07-23 09:22 G	26390106.76	26390106.89	26390107.02	0.0080	0.0065
Venus	67542-03-05 19:55 G	26390332.11	26390332.33	26390332.55	0.0080	0.0004
Venus	67542-10-17 05:46 G	26390557.67	26390557.74	26390557.86	0.0079	0.0072
Earth	67543-01-01 10:34 G	26390633.74	26390633.94	26390634.15	0.0079	0.0049
Moon	67543-01-01 12:58 G	26390633.85	26390634.04	26390634.25	0.0079	0.0050 *
Mercury	67543-09-09 00:00 G	26390884.43	26390884.50	26390884.60	0.0079	0.0069
Mercury	67543-12-06 01:55 G	26390972.46	26390972.58	26390972.72	0.0079	0.0048
Mercury	67544-03-03 03:51 G	26391060.51	26391060.66	26391060.83	0.0079	0.0027
Mercury	67544-05-30 06:00 G	26391148.58	26391148.75	26391148.91	0.0079	0.0005
Mercury	67544-08-26 07:41 G	26391236.66	26391236.82	26391236.99	0.0078	0.0016
Mercury	67544-11-22 09:36 G	26391324.75	26391324.90	26391325.05	0.0078	0.0037
Mercury	67545-02-18 11:31 G	26391412.87	26391412.98	26391413.09	0.0078	0.0058
Venus	67700-08-02 21:07 G	26448191.20	26448191.38	26448191.59	0.0064	0.0031
Venus	67701-03-16 01:41 G	26448416.35	26448416.57	26448416.79	0.0064	0.0004
Venus	67701-10-27 05:17 G	26448641.56	26448641.72	26448641.91	0.0064	0.0039
Earth	67702-07-03 02:39 G	26448890.38	26448890.61	26448890.86	0.0065	0.0022
Moon	67702-07-03 05:17 G	26448890.47	26448890.72	26448890.97	0.0065	0.0018 *
Mercury	67703-01-15 16:05 G	26449087.17	26449087.17	26449087.21	0.0065	0.0064
Mercury	67703-04-13 17:03 G	26449175.13	26449175.21	26449175.30	0.0065	0.0053
Mercury	67703-07-10 17:31 G	26449263.14	26449263.23	26449263.36	0.0065	0.0043
Mercury	67703-10-06 18:29 G	26449351.15	26449351.27	26449351.41	0.0065	0.0032
Mercury	67704-01-02 19:12 G	26449439.16	26449439.30	26449439.45	0.0065	0.0021



Mercury	67704-03-30 19:55 G	26449527.19	26449527.33	26449527.48	0.0065	0.0011
Mercury	67704-06-26 20:39 G	26449615.21	26449615.36	26449615.51	0.0065	0.0002
Mercury	67704-09-22 21:22 G	26449703.25	26449703.39	26449703.54	0.0065	0.0011
Mercury	67704-12-19 22:05 G	26449791.28	26449791.42	26449791.56	0.0065	0.0022
Mercury	67705-03-17 22:48 G	26449879.32	26449879.45	26449879.58	0.0066	0.0033
Mercury	67705-06-13 23:17 G	26449967.37	26449967.47	26449967.59	0.0066	0.0044
Mercury	67705-09-10 00:00 G	26450055.43	26450055.50	26450055.59	0.0066	0.0055
Mercury	67705-12-07 00:43 G	26450143.53	26450143.53	26450143.55	0.0066	0.0066
Mars	67711-04-21 13:12 G	26452104.78	26452105.05	26452105.40	0.0068	0.0030
Venus	67790-02-07 03:36 G	26480886.43	26480886.65	26480886.87	0.0080	0.0012
Venus	67790-09-20 13:27 G	26481111.92	26481112.06	26481112.24	0.0080	0.0056
Moon	67791-01-03 19:41 G	26481217.11	26481217.32	26481217.56	0.0079	0.0042
Earth	67791-01-03 23:03 G	26481217.25	26481217.46	26481217.71	0.0079	0.0038 *
Mercury	67791-07-10 06:43 G	26481404.74	26481404.78	26481404.82	0.0079	0.0076
Mercury	67791-10-06 08:39 G	26481492.74	26481492.86	26481492.98	0.0079	0.0055
Mercury	67792-01-02 10:19 G	26481580.79	26481580.93	26481581.09	0.0079	0.0034
Mercury	67792-03-30 12:29 G	26481668.85	26481669.02	26481669.18	0.0079	0.0013
Mercury	67792-06-26 14:10 G	26481756.93	26481757.09	26481757.26	0.0079	0.0008
Mercury	67792-09-22 15:51 G	26481845.01	26481845.16	26481845.33	0.0078	0.0029
Mercury	67792-12-19 17:31 G	26481933.12	26481933.23	26481933.38	0.0078	0.0050
Mercury	67793-03-17 19:41 G	26482021.26	26482021.32	26482021.39	0.0078	0.0071
Venus	67948-07-08 07:27 G	26538745.65	26538745.81	26538746.02	0.0064	0.0034
Venus	67949-02-18 12:00 G	26538970.78	26538971.00	26538971.22	0.0064	0.0001
Venus	67949-10-01 15:36 G	26539195.99	26539196.15	26539196.35	0.0064	0.0037
Moon	67950-07-06 18:15 G	26539474.02	26539474.26	26539474.51	0.0065	0.0002
Earth	67950-07-06 19:55 G	26539474.07	26539474.33	26539474.59	0.0065	0.0000 *
Mercury	67950-11-17 00:43 G	26539607.50	26539607.53	26539607.60	0.0065	0.0061
Mercury	67951-02-13 01:27 G	26539695.48	26539695.56	26539695.67	0.0065	0.0050
Mercury	67951-05-12 02:24 G	26539783.49	26539783.60	26539783.72	0.0065	0.0039
Mercury	67951-08-08 02:53 G	26539871.50	26539871.62	26539871.77	0.0065	0.0029

Mercury	67951-11-04 03:51 G	26539959.52	26539959.66	26539959.81	0.0065	0.0018
Mercury	67952-01-31 04:34 G	26540047.54	26540047.69	26540047.84	0.0065	0.0007
Mercury	67952-04-28 05:17 G	26540135.57	26540135.72	26540135.87	0.0065	0.0004
Mercury	67952-07-25 06:00 G	26540223.61	26540223.75	26540223.90	0.0065	0.0014
Mercury	67952-10-21 06:29 G	26540311.64	26540311.77	26540311.92	0.0065	0.0026
Mercury	67953-01-17 07:12 G	26540399.69	26540399.80	26540399.94	0.0066	0.0036
Mercury	67953-04-15 08:10 G	26540487.74	26540487.84	26540487.94	0.0066	0.0047
Mercury	67953-07-12 08:39 G	26540575.80	26540575.86	26540575.94	0.0066	0.0058
Mars	67959-08-01 14:39 G	26542786.91	26542787.11	26542787.38	0.0068	0.0050

# 69TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 69th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	68038-01-12 14:24 G		26571440.89	26571441.10	26571441.32	0.0080	0.0017	
Venus	68038-08-26 00:29 G		26571666.36	26571666.52	26571666.70	0.0079	0.0051	
Earth	68039-01-07 17:46 G		26571800.98	26571801.24	26571801.50	0.0079	0.0007	
Moon	68039-01-07 21:07 G		26571801.13	26571801.38	26571801.65	0.0079	0.0008	*
Mercury	68039-05-11 14:10 G		26571925.06	26571925.09	26571925.16	0.0079	0.0075	
Mercury	68039-08-07 16:05 G		26572013.06	26572013.17	26572013.30	0.0079	0.0054	
Mercury	68039-11-03 18:00 G		26572101.11	26572101.25	26572101.41	0.0079	0.0033	
Mercury	68040-01-30 19:55 G		26572189.17	26572189.33	26572189.50	0.0079	0.0012	
Mercury	68040-04-27 21:51 G		26572277.25	26572277.41	26572277.58	0.0079	0.0010	

Mercury	68040-07-24 23:31 G	26572365.34	26572365.48	26572365.64	0.0078	0.0031
Mercury	68040-10-21 01:27 G	26572453.44	26572453.56	26572453.69	0.0078	0.0051
Mercury	68041-01-17 03:07 G	26572541.58	26572541.63	26572541.71	0.0078	0.0072
Mars	68045-02-25 06:43 G	26574041.70	26574041.78	26574041.93	0.0076	0.0070
Venus	68196-06-11 19:55 G	26629300.15	26629300.33	26629300.53	0.0064	0.0032
Venus	68197-01-23 00:00 G	26629525.29	26629525.50	26629525.73	0.0064	0.0003
Moon	68197-07-08 01:41 G	26629691.57	26629691.57	26629691.58	0.0064	0.0064
Venus	68197-09-05 04:05 G	26629750.50	26629750.67	26629750.86	0.0064	0.0038
Mercury	68198-06-21 09:07 G	26630039.88	26630039.88	26630039.92	0.0065	0.0064
Earth	68198-07-09 15:07 G	26630057.92	26630058.13	26630058.38	0.0065	0.0030
Moon	68198-07-09 15:51 G	26630057.94	26630058.16	26630058.42	0.0065	0.0027 *
Mercury	68198-09-17 10:05 G	26630127.84	26630127.92	26630128.01	0.0065	0.0053
Mercury	68198-12-14 10:34 G	26630215.84	26630215.94	26630216.07	0.0065	0.0043
Mercury	68199-03-12 11:31 G	26630303.85	26630303.98	26630304.12	0.0065	0.0032
Mercury	68199-06-08 12:15 G	26630391.87	26630392.01	26630392.16	0.0065	0.0021
Mercury	68199-09-04 12:58 G	26630479.90	26630480.04	26630480.19	0.0065	0.0011
Mercury	68199-12-01 13:41 G	26630567.92	26630568.07	26630568.22	0.0065	0.0002
Mercury	68200-02-27 14:24 G	26630655.96	26630656.10	26630656.25	0.0065	0.0011
Mercury	68200-05-26 14:53 G	26630743.99	26630744.12	26630744.28	0.0065	0.0023
Mercury	68200-08-22 15:51 G	26630832.03	26630832.16	26630832.29	0.0065	0.0033
Mercury	68200-11-18 16:19 G	26630920.08	26630920.18	26630920.30	0.0066	0.0044
Mercury	68201-02-14 17:03 G	26631008.14	26631008.21	26631008.30	0.0066	0.0055
Mercury	68201-05-13 18:00 G	26631096.25	26631096.25	26631096.26	0.0066	0.0066
Venus	68285-05-06 17:46 G	26661770.19	26661770.24	26661770.35	0.0080	0.0075
Venus	68285-12-18 04:48 G	26661995.49	26661995.70	26661995.93	0.0080	0.0007
Venus	68286-07-31 15:07 G	26662221.00	26662221.13	26662221.28	0.0079	0.0061
Moon	68287-01-11 13:55 G	26662384.91	26662385.08	26662385.29	0.0079	0.0054
Earth	68287-01-11 17:31 G	26662385.04	26662385.23	26662385.45	0.0079	0.0049 *
Mercury	68287-03-12 23:31 G	26662445.39	26662445.48	26662445.59	0.0079	0.0062
Mercury	68287-06-09 01:27 G	26662533.42	26662533.56	26662533.71	0.0079	0.0040

Mercury	68287-09-05 03:22 G	26662621.48	26662621.64	26662621.80	0.0079	0.0019
Mercury	68287-12-02 05:17 G	26662709.55	26662709.72	26662709.88	0.0079	0.0002
Mercury	68288-02-28 06:58 G	26662797.63	26662797.79	26662797.95	0.0079	0.0023
Mercury	68288-05-26 08:53 G	26662885.73	26662885.87	26662886.01	0.0078	0.0044
Mercury	68288-08-22 10:34 G	26662973.85	26662973.94	26662974.04	0.0078	0.0065
Mars	68293-06-08 11:17 G	26664724.77	26664724.97	26664725.22	0.0076	0.0048
Venus	68443-10-05 06:15 G	26719629.68	26719629.76	26719629.88	0.0064	0.0057
Venus	68444-05-17 10:48 G	26719854.75	26719854.95	26719855.16	0.0064	0.0022
Venus	68444-12-28 15:07 G	26720079.91	26720080.13	26720080.34	0.0064	0.0013
Earth	68445-07-12 03:51 G	26720275.45	26720275.66	26720275.92	0.0064	0.0024
Moon	68445-07-12 05:31 G	26720275.50	26720275.73	26720276.00	0.0064	0.0021 *
Venus	68445-08-10 19:12 G	26720305.15	26720305.30	26720305.45	0.0064	0.0048
Mercury	68446-01-24 18:29 G	26720472.24	26720472.27	26720472.34	0.0065	0.0061
Mercury	68446-04-22 19:27 G	26720560.22	26720560.31	26720560.41	0.0065	0.0050
Mercury	68446-07-19 19:55 G	26720648.22	26720648.33	26720648.46	0.0065	0.0040
Mercury	68446-10-15 20:39 G	26720736.24	26720736.36	26720736.51	0.0065	0.0029
Mercury	68447-01-11 21:36 G	26720824.26	26720824.40	26720824.55	0.0065	0.0018
Mercury	68447-04-09 22:19 G	26720912.28	26720912.43	26720912.58	0.0065	0.0007
Mercury	68447-07-06 23:03 G	26721000.31	26721000.46	26721000.61	0.0065	0.0003
Mercury	68447-10-02 23:46 G	26721088.34	26721088.49	26721088.64	0.0065	0.0014
Mercury	68447-12-30 00:15 G	26721176.38	26721176.51	26721176.66	0.0065	0.0026
Mercury	68448-03-27 01:12 G	26721264.43	26721264.55	26721264.68	0.0065	0.0036
Mercury	68448-06-23 01:55 G	26721352.48	26721352.58	26721352.69	0.0066	0.0047
Mercury	68448-09-19 02:24 G	26721440.54	26721440.60	26721440.68	0.0066	0.0058
Venus	68533-04-11 12:00 G	26752324.84	26752325.00	26752325.18	0.0080	0.0052
Venus	68533-11-22 22:34 G	26752550.23	26752550.44	26752550.67	0.0080	0.0016
Moon	68534-01-13 14:53 G	26752601.97	26752602.12	26752602.29	0.0080	0.0062
Earth	68534-01-13 18:15 G	26752602.11	26752602.26	26752602.45	0.0080	0.0060 *
Mercury	68534-10-16 07:55 G	26752877.74	26752877.83	26752877.95	0.0079	0.0060
Mercury	68535-01-12 09:51 G	26752965.77	26752965.91	26752966.06	0.0079	0.0039

Mercury	68535-04-10 11:46 G	26753053.83	26753053.99	26753054.16	0.0079	0.0018
Mercury	68535-07-07 13:41 G	26753141.91	26753142.07	26753142.24	0.0079	0.0004
Mercury	68535-10-03 15:22 G	26753229.99	26753230.14	26753230.31	0.0079	0.0025
Mercury	68535-12-30 17:03 G	26753318.09	26753318.21	26753318.36	0.0078	0.0046
Mercury	68536-03-27 18:43 G	26753406.21	26753406.28	26753406.39	0.0078	0.0067
Venus	68691-09-09 22:34 G	26810184.29	26810184.44	26810184.62	0.0064	0.0042
Venus	68692-04-22 03:07 G	26810409.42	26810409.63	26810409.85	0.0064	0.0007
Venus	68692-12-03 07:27 G	26810634.61	26810634.81	26810635.01	0.0064	0.0028
Mercury	68693-06-03 03:36 G	26810816.65	26810816.65	26810816.67	0.0065	0.0065
Moon	68693-07-16 05:17 G	26810859.51	26810859.72	26810859.95	0.0065	0.0029
Earth	68693-07-16 06:43 G	26810859.56	26810859.78	26810860.02	0.0065	0.0029 *
Venus	68693-07-16 11:03 G	26810859.95	26810859.96	26810860.02	0.0065	0.0064 *
Mercury	68693-08-30 04:19 G	26810904.61	26810904.68	26810904.78	0.0065	0.0054
Mercury	68693-11-26 05:17 G	26810992.61	26810992.72	26810992.83	0.0065	0.0043
Mercury	68694-02-22 05:46 G	26811080.62	26811080.74	26811080.88	0.0065	0.0033
Mercury	68694-05-21 06:29 G	26811168.64	26811168.77	26811168.92	0.0065	0.0022
Mercury	68694-08-17 07:27 G	26811256.66	26811256.81	26811256.96	0.0065	0.0011
Mercury	68694-11-13 08:10 G	26811344.69	26811344.84	26811344.99	0.0065	0.0001
Mercury	68695-02-09 08:53 G	26811432.72	26811432.87	26811433.02	0.0065	0.0011
Mercury	68695-05-08 09:36 G	26811520.76	26811520.90	26811521.04	0.0065	0.0021
Mercury	68695-08-04 10:05 G	26811608.80	26811608.92	26811609.06	0.0065	0.0033
Mercury	68695-10-31 10:48 G	26811696.85	26811696.95	26811697.07	0.0066	0.0044
Mercury	68696-01-27 11:17 G	26811784.91	26811784.97	26811785.07	0.0066	0.0055
Mercury	68696-04-24 12:29 G	26811873.01	26811873.02	26811873.04	0.0066	0.0065
Venus	68781-03-17 10:05 G	26842879.70	26842879.92	26842880.14	0.0080	0.0014
Venus	68781-10-28 20:10 G	26843105.20	26843105.34	26843105.52	0.0079	0.0054
Earth	68782-01-18 06:00 G	26843186.55	26843186.75	26843186.99	0.0079	0.0043
Moon	68782-01-18 10:19 G	26843186.71	26843186.93	26843187.14	0.0079	0.0045 *
Mercury	68782-02-22 16:19 G	26843222.10	26843222.18	26843222.27	0.0079	0.0067
Mercury	68782-05-21 18:00 G	26843310.12	26843310.25	26843310.39	0.0079	0.0046

Mercury	68782-08-17 19:55 G	26843398.18	26843398.33	26843398.49	0.0079	0.0024
Mercury	68782-11-13 21:51 G	26843486.25	26843486.41	26843486.58	0.0079	0.0003
Mercury	68783-02-09 23:31 G	26843574.33	26843574.48	26843574.65	0.0079	0.0018
Mercury	68783-05-09 01:27 G	26843662.42	26843662.56	26843662.71	0.0079	0.0039
Mercury	68783-08-05 03:07 G	26843750.53	26843750.63	26843750.75	0.0078	0.0060
Mars	68788-02-09 16:34 G	26845399.94	26845400.19	26845400.45	0.0076	0.0037
Venus	68939-01-02 13:41 G	26900513.96	26900514.07	26900514.19	0.0064	0.0054
Venus	68939-08-15 17:31 G	26900739.03	26900739.23	26900739.45	0.0064	0.0020
Venus	68940-03-27 21:51 G	26900964.21	26900964.41	26900964.63	0.0064	0.0015
Moon	68940-07-18 23:17 G	26901077.22	26901077.47	26901077.73	0.0064	0.0001
Earth	68940-07-19 01:55 G	26901077.33	26901077.58	26901077.84	0.0064	0.0003 *
Mercury	68940-10-10 13:12 G	26901161.04	26901161.05	26901161.11	0.0065	0.0063
Venus	68940-11-08 01:55 G	26901189.46	26901189.58	26901189.73	0.0065	0.0051
Mercury	68941-01-06 14:10 G	26901249.01	26901249.09	26901249.19	0.0065	0.0052
Mercury	68941-04-04 15:07 G	26901337.02	26901337.13	26901337.25	0.0065	0.0041
Mercury	68941-07-01 15:36 G	26901425.03	26901425.15	26901425.30	0.0065	0.0031
Mercury	68941-09-27 16:34 G	26901513.05	26901513.19	26901513.34	0.0065	0.0020
Mercury	68941-12-24 17:17 G	26901601.07	26901601.22	26901601.37	0.0065	0.0009
Mercury	68942-03-22 18:00 G	26901689.10	26901689.25	26901689.41	0.0065	0.0003
Mercury	68942-06-18 18:43 G	26901777.14	26901777.28	26901777.43	0.0065	0.0013
Mercury	68942-09-14 19:27 G	26901865.17	26901865.31	26901865.46	0.0065	0.0024
Mercury	68942-12-11 20:10 G	26901953.22	26901953.34	26901953.47	0.0065	0.0035
Mercury	68943-03-09 20:39 G	26902041.27	26902041.36	26902041.48	0.0065	0.0046
Mercury	68943-06-05 21:22 G	26902129.33	26902129.39	26902129.48	0.0066	0.0057

# 70TH MILLENNIUM CE

# **This is a list of transits visible from Pluto in the 70th millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	69028-07-09 23:17	G	26933209.29	26933209.47	26933209.68	0.0080	0.0035	
Earth	69029-01-20 17:03	G	26933403.97	26933404.21	26933404.47	0.0079	0.0025	
Moon	69029-01-20 20:24	G	26933404.13	26933404.35	26933404.61	0.0079	0.0030	*
Venus	69029-02-20 09:51	G	26933434.72	26933434.91	26933435.12	0.0079	0.0032	
Mercury	69029-07-02 00:58	G	26933566.47	26933566.54	26933566.64	0.0079	0.0067	
Mercury	69029-09-28 03:07	G	26933654.50	26933654.63	26933654.77	0.0079	0.0046	
Mercury	69029-12-25 05:03	G	26933742.55	26933742.71	26933742.86	0.0079	0.0024	
Mercury	69030-03-23 06:43	G	26933830.62	26933830.78	26933830.95	0.0079	0.0004	
Mercury	69030-06-19 08:24	G	26933918.70	26933918.85	26933919.02	0.0079	0.0018	
Mercury	69030-09-15 10:19	G	26934006.79	26934006.93	26934007.08	0.0079	0.0039	
Mercury	69030-12-12 12:00	G	26934094.90	26934095.00	26934095.12	0.0078	0.0060	
Venus	69186-04-27 05:17	G	26990843.70	26990843.72	26990843.80	0.0064	0.0062	
Venus	69186-12-08 09:51	G	26991068.72	26991068.91	26991069.12	0.0064	0.0028	
Venus	69187-07-21 14:10	G	26991293.87	26991294.09	26991294.31	0.0064	0.0008	
Moon	69187-07-22 19:27	G	26991295.10	26991295.31	26991295.56	0.0064	0.0029	
Earth	69187-07-22 22:48	G	26991295.23	26991295.45	26991295.70	0.0064	0.0026	*
Mercury	69188-02-17 23:46	G	26991505.43	26991505.49	26991505.57	0.0065	0.0057	
Venus	69188-03-02 18:15	G	26991519.10	26991519.26	26991519.43	0.0065	0.0043	
Mercury	69188-05-16 00:29	G	26991593.43	26991593.52	26991593.64	0.0065	0.0046	
Mercury	69188-08-12 01:27	G	26991681.43	26991681.56	26991681.69	0.0065	0.0035	
Mercury	69188-11-08 01:55	G	26991769.45	26991769.58	26991769.73	0.0065	0.0025	
Mercury	69189-02-04 02:53	G	26991857.47	26991857.62	26991857.77	0.0065	0.0014	
Mercury	69189-05-03 03:36	G	26991945.50	26991945.65	26991945.80	0.0065	0.0003	
Mercury	69189-07-30 04:19	G	26992033.53	26992033.68	26992033.83	0.0065	0.0008	
Mercury	69189-10-26 05:03	G	26992121.57	26992121.71	26992121.86	0.0065	0.0019	

Mercury	69190-01-22 05:46 G	26992209.61	26992209.74	26992209.88	0.0065	0.0030
Mercury	69190-04-20 06:29 G	26992297.66	26992297.77	26992297.89	0.0065	0.0041
Mercury	69190-07-17 06:58 G	26992385.71	26992385.79	26992385.90	0.0066	0.0052
Mercury	69190-10-13 07:41 G	26992473.79	26992473.82	26992473.88	0.0066	0.0063
Venus	69275-11-01 17:17 G	27023539.03	27023539.22	27023539.42	0.0080	0.0040
Earth	69276-01-23 10:05 G	27023621.80	27023621.92	27023622.09	0.0080	0.0067
Moon	69276-01-23 13:27 G	27023621.92	27023622.06	27023622.21	0.0080	0.0065 *
Venus	69276-06-14 03:22 G	27023764.45	27023764.64	27023764.87	0.0079	0.0028
Mercury	69276-08-11 09:51 G	27023822.87	27023822.91	27023822.97	0.0079	0.0076
Mercury	69276-11-07 11:31 G	27023910.88	27023910.98	27023911.11	0.0079	0.0055
Mercury	69277-02-03 13:27 G	27023998.92	27023999.06	27023999.22	0.0079	0.0033
Mercury	69277-05-02 15:22 G	27024086.98	27024087.14	27024087.31	0.0079	0.0012
Mercury	69277-07-29 17:17 G	27024175.06	27024175.22	27024175.39	0.0079	0.0009
Mercury	69277-10-25 19:12 G	27024263.15	27024263.30	27024263.45	0.0079	0.0030
Mercury	69278-01-21 20:53 G	27024351.25	27024351.37	27024351.50	0.0079	0.0051
Mercury	69278-04-19 22:34 G	27024439.39	27024439.44	27024439.51	0.0078	0.0072
Mars	69282-10-13 01:41 G	27026076.32	27026076.57	27026076.86	0.0076	0.0027
Venus	69433-08-19 23:46 G	27081173.48	27081173.49	27081173.57	0.0064	0.0063
Venus	69434-04-02 04:19 G	27081398.50	27081398.68	27081398.89	0.0064	0.0028
Moon	69434-07-25 20:39 G	27081513.17	27081513.36	27081513.59	0.0064	0.0038
Earth	69434-07-26 00:15 G	27081513.31	27081513.51	27081513.74	0.0064	0.0037 *
Venus	69434-11-13 08:39 G	27081623.65	27081623.86	27081624.09	0.0064	0.0007
Mercury	69435-03-31 10:19 G	27081761.86	27081761.93	27081762.01	0.0065	0.0056
Venus	69435-06-26 12:43 G	27081848.88	27081849.03	27081849.21	0.0065	0.0043
Mercury	69435-06-27 11:03 G	27081849.86	27081849.96	27081850.07	0.0065	0.0045
Earth	69435-07-27 11:03 G	27081879.89	27081879.96	27081880.09	0.0065	0.0060
Moon	69435-07-27 14:24 G	27081880.03	27081880.10	27081880.22	0.0065	0.0060 *
Mercury	69435-09-23 11:31 G	27081937.87	27081937.98	27081938.12	0.0065	0.0035
Mercury	69435-12-20 12:29 G	27082025.89	27082026.02	27082026.17	0.0065	0.0024
Mercury	69436-03-17 13:12 G	27082113.91	27082114.05	27082114.21	0.0065	0.0013



Mercury	69436-06-13 14:10 G	27082201.94	27082202.09	27082202.24	0.0065	0.0002
Mercury	69436-09-09 14:39 G	27082289.97	27082290.11	27082290.27	0.0065	0.0009
Mercury	69436-12-06 15:36 G	27082378.00	27082378.15	27082378.29	0.0065	0.0019
Mercury	69437-03-04 16:05 G	27082466.05	27082466.17	27082466.31	0.0065	0.0031
Mercury	69437-05-31 16:48 G	27082554.09	27082554.20	27082554.33	0.0065	0.0041
Mercury	69437-08-27 17:17 G	27082642.15	27082642.22	27082642.33	0.0065	0.0053
Mercury	69437-11-23 18:00 G	27082730.24	27082730.25	27082730.31	0.0066	0.0064
Mars	69443-08-02 13:12 G	27084807.89	27084808.05	27084808.25	0.0068	0.0057
Venus	69523-02-25 12:29 G	27113868.85	27113869.02	27113869.23	0.0080	0.0039
Mercury	69523-09-23 19:12 G	27114079.29	27114079.30	27114079.34	0.0079	0.0079
Venus	69523-10-08 23:17 G	27114094.26	27114094.47	27114094.68	0.0079	0.0029
Mercury	69523-12-20 20:53 G	27114167.28	27114167.37	27114167.50	0.0079	0.0058
Mercury	69524-03-17 22:48 G	27114255.32	27114255.45	27114255.61	0.0079	0.0036
Mercury	69524-06-14 00:43 G	27114343.38	27114343.53	27114343.70	0.0079	0.0015
Mercury	69524-09-10 02:39 G	27114431.45	27114431.61	27114431.78	0.0079	0.0006
Mercury	69524-12-07 04:34 G	27114519.53	27114519.69	27114519.84	0.0079	0.0027
Mercury	69525-03-05 06:15 G	27114607.63	27114607.76	27114607.89	0.0079	0.0048
Mercury	69525-06-01 07:55 G	27114695.76	27114695.83	27114695.92	0.0079	0.0069
Venus	69680-12-11 20:24 G	27171503.28	27171503.35	27171503.47	0.0064	0.0058
Venus	69681-07-25 00:43 G	27171728.34	27171728.53	27171728.75	0.0064	0.0023
Moon	69681-07-28 00:58 G	27171731.35	27171731.54	27171731.78	0.0064	0.0036
Earth	69681-07-28 04:05 G	27171731.49	27171731.67	27171731.90	0.0064	0.0038 *
Mercury	69682-02-11 20:10 G	27171930.32	27171930.34	27171930.41	0.0065	0.0062
Venus	69682-03-07 05:03 G	27171953.50	27171953.71	27171953.93	0.0065	0.0012
Mercury	69682-05-10 21:07 G	27172018.30	27172018.38	27172018.49	0.0065	0.0051
Earth	69682-07-29 15:07 G	27172098.05	27172098.13	27172098.27	0.0065	0.0058
Moon	69682-07-29 18:43 G	27172098.17	27172098.28	27172098.44	0.0065	0.0055 *
Mercury	69682-08-06 22:05 G	27172106.30	27172106.42	27172106.54	0.0065	0.0040
Venus	69682-10-18 09:07 G	27172178.75	27172178.88	27172179.04	0.0065	0.0048
Mercury	69682-11-02 22:48 G	27172194.32	27172194.45	27172194.59	0.0065	0.0029

Mercury	69683-01-29 23:17 G	27172282.34	27172282.47	27172282.63	0.0065	0.0019
Mercury	69683-04-28 00:15 G	27172370.36	27172370.51	27172370.67	0.0065	0.0008
Mercury	69683-07-25 00:58 G	27172458.39	27172458.54	27172458.70	0.0065	0.0004
Mercury	69683-10-21 01:41 G	27172546.43	27172546.57	27172546.72	0.0065	0.0014
Mercury	69684-01-17 02:10 G	27172634.47	27172634.59	27172634.75	0.0065	0.0026
Mercury	69684-04-14 03:07 G	27172722.51	27172722.63	27172722.76	0.0065	0.0036
Mercury	69684-07-11 03:51 G	27172810.56	27172810.66	27172810.77	0.0065	0.0047
Mercury	69684-10-07 04:34 G	27172898.63	27172898.69	27172898.77	0.0066	0.0058
Venus	69770-06-19 12:43 G	27204198.83	27204199.03	27204199.26	0.0080	0.0020
Mercury	69770-11-03 06:15 G	27204335.69	27204335.76	27204335.86	0.0079	0.0068
Mercury	69771-01-30 08:10 G	27204423.72	27204423.84	27204423.98	0.0079	0.0047
Venus	69771-01-30 22:48 G	27204424.29	27204424.45	27204424.65	0.0079	0.0048
Mercury	69771-04-28 10:05 G	27204511.77	27204511.92	27204512.08	0.0079	0.0025
Mercury	69771-07-25 12:00 G	27204599.84	27204600.00	27204600.16	0.0079	0.0004
Mercury	69771-10-21 13:41 G	27204687.91	27204688.07	27204688.24	0.0079	0.0017
Mercury	69772-01-17 15:22 G	27204776.01	27204776.14	27204776.29	0.0079	0.0038
Mercury	69772-04-14 17:03 G	27204864.12	27204864.21	27204864.33	0.0079	0.0059
Venus	69928-04-06 19:27 G	27261833.17	27261833.31	27261833.48	0.0064	0.0045
Moon	69928-08-01 10:48 G	27261949.73	27261949.95	27261950.20	0.0064	0.0030
Earth	69928-08-01 12:29 G	27261949.79	27261950.02	27261950.26	0.0064	0.0027 *
Venus	69928-11-17 23:46 G	27262058.28	27262058.49	27262058.72	0.0064	0.0011
Mercury	69928-12-28 07:27 G	27262098.78	27262098.81	27262098.87	0.0064	0.0061
Mercury	69929-03-26 08:24 G	27262186.76	27262186.85	27262186.95	0.0065	0.0050
Mercury	69929-06-22 08:53 G	27262274.76	27262274.87	27262275.01	0.0065	0.0040
Venus	69929-07-01 03:51 G	27262283.48	27262283.66	27262283.88	0.0065	0.0026
Mercury	69929-09-18 09:51 G	27262362.78	27262362.91	27262363.05	0.0065	0.0029
Mercury	69929-12-15 10:34 G	27262450.80	27262450.94	27262451.09	0.0065	0.0018
Venus	69930-02-11 08:24 G	27262508.79	27262508.85	27262508.93	0.0065	0.0061
Mercury	69930-03-13 11:31 G	27262538.82	27262538.98	27262539.13	0.0065	0.0007
Mercury	69930-06-09 12:15 G	27262626.85	27262627.01	27262627.16	0.0065	0.0004

Mercury	69930-09-05 12:58 G	27262714.89	27262715.04	27262715.19	0.0065	0.0015
Mercury	69930-12-02 13:27 G	27262802.93	27262803.06	27262803.21	0.0065	0.0026
Mercury	69931-02-28 14:10 G	27262890.97	27262891.09	27262891.23	0.0065	0.0036
Mercury	69931-05-27 14:53 G	27262979.03	27262979.12	27262979.23	0.0065	0.0047
Mercury	69931-08-23 15:22 G	27263067.09	27263067.14	27263067.23	0.0065	0.0059

# 71ST MILLENNIUM CE

This is a list of transits visible from Pluto in the 71st millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	70017-03-01 04:34 G		27294303.56	27294303.69	27294303.85	0.0080	0.0060	
Mercury	70017-09-17 16:48 G		27294504.13	27294504.20	27294504.27	0.0080	0.0071	
Venus	70017-10-12 15:22 G		27294528.92	27294529.14	27294529.36	0.0080	0.0007	
Mercury	70017-12-14 18:29 G		27294592.15	27294592.27	27294592.40	0.0079	0.0050	
Mercury	70018-03-12 20:24 G		27294680.20	27294680.35	27294680.50	0.0079	0.0029	
Venus	70018-05-26 01:27 G		27294754.49	27294754.56	27294754.64	0.0079	0.0074	
Mercury	70018-06-08 22:05 G		27294768.26	27294768.42	27294768.59	0.0079	0.0008	
Mercury	70018-09-05 00:00 G		27294856.34	27294856.50	27294856.66	0.0079	0.0013	
Mercury	70018-12-02 01:27 G		27294944.43	27294944.56	27294944.72	0.0079	0.0035	
Mercury	70019-02-28 03:36 G		27295032.53	27295032.65	27295032.76	0.0079	0.0055	
Mercury	70019-05-27 05:17 G		27295120.68	27295120.72	27295120.76	0.0079	0.0076	
Mars	70023-11-08 21:07 G		27296747.14	27296747.38	27296747.64	0.0076	0.0039	
Venus	70174-12-17 15:51 G		27351938.13	27351938.16	27351938.26	0.0064	0.0062	

Venus	70175-07-30 20:24 G	27352163.17	27352163.35	27352163.57	0.0064	0.0026
Earth	70175-08-04 23:46 G	27352168.24	27352168.49	27352168.75	0.0064	0.0005
Moon	70175-08-05 00:00 G	27352168.24	27352168.50	27352168.77	0.0064	0.0004 *
Mercury	70175-11-11 18:58 G	27352267.24	27352267.29	27352267.39	0.0065	0.0056
Mercury	70176-02-07 19:55 G	27352355.23	27352355.33	27352355.45	0.0065	0.0045
Venus	70176-03-12 00:43 G	27352388.32	27352388.53	27352388.76	0.0065	0.0010
Mercury	70176-05-05 20:53 G	27352443.25	27352443.37	27352443.51	0.0065	0.0034
Mercury	70176-08-01 21:36 G	27352531.26	27352531.40	27352531.55	0.0065	0.0023
Venus	70176-10-23 05:17 G	27352613.57	27352613.72	27352613.88	0.0065	0.0045
Mercury	70176-10-28 22:34 G	27352619.29	27352619.44	27352619.59	0.0065	0.0012
Mercury	70177-01-24 23:17 G	27352707.32	27352707.47	27352707.62	0.0065	0.0002
Mercury	70177-04-23 00:00 G	27352795.35	27352795.50	27352795.65	0.0065	0.0009
Mercury	70177-07-20 00:43 G	27352883.39	27352883.53	27352883.68	0.0065	0.0020
Mercury	70177-10-16 01:12 G	27352971.43	27352971.55	27352971.70	0.0065	0.0032
Mercury	70178-01-12 01:55 G	27353059.48	27353059.58	27353059.71	0.0065	0.0042
Mercury	70178-04-10 02:39 G	27353147.54	27353147.61	27353147.71	0.0065	0.0053
Mercury	70178-07-07 03:07 G	27353235.63	27353235.63	27353235.68	0.0066	0.0065
Mars	70184-08-25 08:39 G	27355476.52	27355476.86	27355477.21	0.0068	0.0002
Moon	70264-02-06 05:31 G	27384494.53	27384494.73	27384494.98	0.0080	0.0039
Earth	70264-02-06 09:07 G	27384494.67	27384494.88	27384495.12	0.0080	0.0039 *
Venus	70264-06-24 11:31 G	27384633.77	27384633.98	27384634.21	0.0080	0.0015
Mercury	70264-08-02 04:05 G	27384672.59	27384672.67	27384672.80	0.0080	0.0061
Mercury	70264-10-29 06:29 G	27384760.63	27384760.77	27384760.91	0.0079	0.0039
Mercury	70265-01-25 08:10 G	27384848.68	27384848.84	27384849.00	0.0079	0.0018
Venus	70265-02-04 21:51 G	27384859.26	27384859.41	27384859.58	0.0079	0.0053
Mercury	70265-04-23 09:51 G	27384936.75	27384936.91	27384937.08	0.0079	0.0005
Mercury	70265-07-20 11:46 G	27385024.84	27385024.99	27385025.15	0.0079	0.0024
Mercury	70265-10-16 13:27 G	27385112.93	27385113.06	27385113.20	0.0079	0.0045
Mercury	70266-01-12 15:22 G	27385201.05	27385201.14	27385201.23	0.0079	0.0066
Moon	70421-08-07 00:29 G	27442020.52	27442020.52	27442020.54	0.0064	0.0064

Earth	70421-08-07 03:36 G	27442020.64	27442020.65	27442020.71	0.0064	0.0064
Venus	70422-04-11 19:41 G	27442268.15	27442268.32	27442268.53	0.0064	0.0034
Mercury	70422-06-30 07:12 G	27442347.72	27442347.80	27442347.89	0.0064	0.0054
Earth	70422-08-08 14:53 G	27442386.91	27442387.12	27442387.36	0.0065	0.0032
Moon	70422-08-08 16:34 G	27442386.99	27442387.19	27442387.44	0.0065	0.0034 *
Mercury	70422-09-26 07:41 G	27442435.72	27442435.82	27442435.95	0.0065	0.0044
Venus	70422-11-23 00:29 G	27442493.30	27442493.52	27442493.74	0.0065	0.0002
Mercury	70422-12-23 08:39 G	27442523.74	27442523.86	27442524.00	0.0065	0.0033
Mercury	70423-03-21 09:22 G	27442611.75	27442611.89	27442612.04	0.0065	0.0022
Mercury	70423-06-17 10:19 G	27442699.78	27442699.93	27442700.08	0.0065	0.0011
Venus	70423-07-06 04:34 G	27442718.52	27442718.69	27442718.88	0.0065	0.0038
Mercury	70423-09-13 11:03 G	27442787.81	27442787.96	27442788.11	0.0065	0.0001
Mercury	70423-12-10 11:46 G	27442875.84	27442875.99	27442876.14	0.0065	0.0011
Mercury	70424-03-07 12:15 G	27442963.88	27442964.01	27442964.17	0.0065	0.0022
Mercury	70424-06-03 13:12 G	27443051.92	27443052.05	27443052.19	0.0065	0.0033
Mercury	70424-08-30 13:55 G	27443139.98	27443140.08	27443140.20	0.0065	0.0044
Mercury	70424-11-26 14:39 G	27443228.04	27443228.11	27443228.20	0.0065	0.0055
Mars	70431-01-16 03:22 G	27445469.40	27445469.64	27445469.93	0.0068	0.0043
Moon	70511-02-10 01:27 G	27474713.31	27474713.56	27474713.82	0.0080	0.0020
Earth	70511-02-10 05:03 G	27474713.47	27474713.71	27474713.97	0.0080	0.0024 *
Venus	70511-03-07 10:48 G	27474738.75	27474738.95	27474739.17	0.0080	0.0026
Mercury	70511-03-21 15:36 G	27474753.06	27474753.15	27474753.26	0.0080	0.0062
Mercury	70511-06-17 17:31 G	27474841.09	27474841.23	27474841.37	0.0079	0.0041
Mercury	70511-09-13 19:12 G	27474929.15	27474929.30	27474929.46	0.0079	0.0020
Venus	70511-10-18 21:07 G	27474964.20	27474964.38	27474964.58	0.0079	0.0041
Mercury	70511-12-10 21:07 G	27475017.22	27475017.38	27475017.54	0.0079	0.0002
Mercury	70512-03-07 22:48 G	27475105.30	27475105.45	27475105.61	0.0079	0.0023
Mercury	70512-06-04 00:15 G	27475193.39	27475193.51	27475193.66	0.0079	0.0044
Mercury	70512-08-31 01:55 G	27475281.51	27475281.58	27475281.70	0.0079	0.0065
Moon	70668-08-10 18:43 G	27532239.04	27532239.28	27532239.54	0.0064	0.0015

Earth	70668-08-10 22:05 G	27532239.20	27532239.42	27532239.69	0.0064	0.0019	*
Mercury	70668-11-19 18:43 G	27532340.23	27532340.28	27532340.36	0.0064	0.0059	
Venus	70668-12-22 21:22 G	27532373.22	27532373.39	27532373.59	0.0064	0.0035	
Mercury	70669-02-15 19:41 G	27532428.23	27532428.32	27532428.43	0.0065	0.0048	
Mercury	70669-05-14 20:10 G	27532516.23	27532516.34	27532516.48	0.0065	0.0038	
Venus	70669-08-05 01:55 G	27532598.36	27532598.58	27532598.80	0.0065	0.0001	
Mercury	70669-08-10 21:07 G	27532604.25	27532604.38	27532604.53	0.0065	0.0027	
Mercury	70669-11-06 22:05 G	27532692.27	27532692.42	27532692.57	0.0065	0.0016	
Mercury	70670-02-02 22:48 G	27532780.30	27532780.45	27532780.61	0.0065	0.0005	
Venus	70670-03-18 05:31 G	27532823.57	27532823.73	27532823.94	0.0065	0.0037	
Mercury	70670-05-01 23:31 G	27532868.33	27532868.48	27532868.64	0.0065	0.0006	
Mercury	70670-07-29 00:15 G	27532956.37	27532956.51	27532956.66	0.0065	0.0017	
Mercury	70670-10-25 00:43 G	27533044.41	27533044.53	27533044.68	0.0065	0.0028	
Mercury	70671-01-21 01:55 G	27533132.46	27533132.58	27533132.70	0.0065	0.0039	
Mercury	70671-04-19 02:24 G	27533220.51	27533220.60	27533220.71	0.0065	0.0050	
Mercury	70671-07-16 03:07 G	27533308.59	27533308.63	27533308.70	0.0065	0.0061	
Mars	70677-06-08 07:41 G	27535462.82	27535462.82	27535462.87	0.0068	0.0068	
Earth	70757-02-12 02:53 G	27564565.52	27564565.62	27564565.75	0.0080	0.0071	
Moon	70757-02-12 04:19 G	27564565.60	27564565.68	27564565.77	0.0080	0.0075	*
Mercury	70757-08-11 02:24 G	27564745.54	27564745.60	27564745.68	0.0080	0.0071	
Mercury	70757-11-07 04:19 G	27564833.56	27564833.68	27564833.81	0.0080	0.0050	
Venus	70757-11-17 14:39 G	27564843.91	27564844.11	27564844.33	0.0080	0.0020	
Mercury	70758-02-03 06:00 G	27564921.61	27564921.75	27564921.91	0.0079	0.0029	
Mercury	70758-05-02 07:55 G	27565009.67	27565009.83	27565010.00	0.0079	0.0008	
Venus	70758-07-01 00:43 G	27565069.37	27565069.53	27565069.73	0.0079	0.0048	
Mercury	70758-07-29 09:51 G	27565097.75	27565097.91	27565098.07	0.0079	0.0014	
Mercury	70758-10-25 11:17 G	27565185.84	27565185.97	27565186.13	0.0079	0.0035	
Mercury	70759-01-21 12:58 G	27565273.94	27565274.04	27565274.17	0.0079	0.0056	
Mercury	70759-04-19 15:07 G	27565362.09	27565362.13	27565362.17	0.0079	0.0076	
Earth	70914-08-14 09:51 G	27622091.79	27622091.91	27622092.08	0.0064	0.0053	

Moon	70914-08-14 10:05 G	27622091.80	27622091.92	27622092.11	0.0064	0.0051	*
Venus	70915-01-22 21:07 G	27622253.37	27622253.38	27622253.44	0.0064	0.0064	
Mercury	70915-04-12 07:41 G	27622332.75	27622332.82	27622332.90	0.0064	0.0057	
Mercury	70915-07-09 08:10 G	27622420.75	27622420.84	27622420.96	0.0065	0.0047	
Moon	70915-08-15 18:29 G	27622458.08	27622458.27	27622458.50	0.0065	0.0039	
Earth	70915-08-15 21:07 G	27622458.21	27622458.38	27622458.59	0.0065	0.0042	*
Venus	70915-09-05 01:41 G	27622478.38	27622478.57	27622478.78	0.0065	0.0028	
Mercury	70915-10-05 09:07 G	27622508.76	27622508.88	27622509.01	0.0065	0.0036	
Mercury	70916-01-01 09:51 G	27622596.78	27622596.91	27622597.06	0.0065	0.0025	
Mercury	70916-03-29 10:48 G	27622684.80	27622684.95	27622685.10	0.0065	0.0014	
Venus	70916-04-17 06:00 G	27622703.53	27622703.75	27622703.97	0.0065	0.0008	
Mercury	70916-06-25 11:31 G	27622772.83	27622772.98	27622773.13	0.0065	0.0003	
Mercury	70916-09-21 12:15 G	27622860.86	27622861.01	27622861.16	0.0065	0.0008	
Venus	70916-11-28 09:51 G	27622928.77	27622928.91	27622929.10	0.0065	0.0044	
Mercury	70916-12-18 12:58 G	27622948.90	27622949.04	27622949.19	0.0065	0.0019	
Mercury	70917-03-16 13:41 G	27623036.94	27623037.07	27623037.21	0.0065	0.0029	
Mercury	70917-06-12 14:24 G	27623124.99	27623125.10	27623125.23	0.0065	0.0040	
Mercury	70917-09-08 15:07 G	27623213.05	27623213.13	27623213.23	0.0065	0.0051	
Mercury	70917-12-05 15:51 G	27623301.13	27623301.16	27623301.21	0.0065	0.0062	
Mars	70923-10-30 21:22 G	27625456.37	27625456.39	27625456.47	0.0068	0.0067	

# 72ND MILLENNIUM CE

This is a list of transits visible from Pluto in the 72nd millennium CE.

PLANET	MAX- TRANSIT	C	START	MAX	END	SUNRAD	DEPTH	S
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TIME

Venus	71003-12-18 10:34 G	27654723.86	27654723.94	27654724.06	0.0080	0.0071
Mercury	71004-01-01 14:24 G	27654738.05	27654738.10	27654738.18	0.0080	0.0072
Moon	71004-02-17 09:07 G	27654784.67	27654784.88	27654785.10	0.0080	0.0042
Earth	71004-02-17 10:34 G	27654784.72	27654784.94	27654785.17	0.0080	0.0039 *
Mercury	71004-03-29 16:05 G	27654826.06	27654826.17	27654826.31	0.0080	0.0051
Mercury	71004-06-25 18:00 G	27654914.11	27654914.25	27654914.41	0.0080	0.0030
Venus	71004-07-30 21:22 G	27654949.17	27654949.39	27654949.61	0.0079	0.0003
Mercury	71004-09-21 19:55 G	27655002.17	27655002.33	27655002.50	0.0079	0.0008
Mercury	71004-12-18 21:36 G	27655090.25	27655090.40	27655090.57	0.0079	0.0014
Venus	71005-03-13 07:12 G	27655174.68	27655174.80	27655174.95	0.0079	0.0063
Mercury	71005-03-16 23:17 G	27655178.34	27655178.47	27655178.63	0.0079	0.0034
Mercury	71005-06-13 00:58 G	27655266.44	27655266.54	27655266.67	0.0079	0.0055
Mercury	71005-09-09 02:39 G	27655354.58	27655354.61	27655354.67	0.0079	0.0076
Mercury	71161-06-05 19:41 G	27712237.31	27712237.32	27712237.36	0.0064	0.0063
Moon	71161-08-18 09:07 G	27712310.64	27712310.88	27712311.13	0.0064	0.0010
Earth	71161-08-18 10:34 G	27712310.69	27712310.94	27712311.20	0.0064	0.0012 *
Mercury	71161-09-01 20:24 G	27712325.28	27712325.35	27712325.45	0.0064	0.0053
Venus	71161-10-05 01:55 G	27712358.49	27712358.58	27712358.74	0.0064	0.0054
Mercury	71161-11-28 21:22 G	27712413.28	27712413.39	27712413.51	0.0065	0.0042
Mercury	71162-02-24 21:51 G	27712501.29	27712501.41	27712501.56	0.0065	0.0032
Venus	71162-05-18 06:43 G	27712583.58	27712583.78	27712584.01	0.0065	0.0018
Mercury	71162-05-23 22:48 G	27712589.31	27712589.45	27712589.61	0.0065	0.0021
Mercury	71162-08-19 23:46 G	27712677.34	27712677.49	27712677.64	0.0065	0.0010
Mercury	71162-11-16 00:29 G	27712765.37	27712765.52	27712765.68	0.0065	0.0002
Venus	71162-12-29 11:17 G	27712808.76	27712808.97	27712809.18	0.0065	0.0018
Mercury	71163-02-12 01:12 G	27712853.40	27712853.55	27712853.71	0.0065	0.0012
Mercury	71163-05-11 01:55 G	27712941.44	27712941.58	27712941.73	0.0065	0.0023
Mercury	71163-08-07 02:24 G	27713029.49	27713029.60	27713029.75	0.0065	0.0035



Venus	71163-08-11 15:36 G	27713034.03	27713034.15	27713034.27	0.0065	0.0055
Mercury	71163-11-03 03:07 G	27713117.54	27713117.63	27713117.76	0.0065	0.0046
Mercury	71164-01-30 03:51 G	27713205.60	27713205.66	27713205.76	0.0065	0.0057
Mars	71170-03-23 16:19 G	27715450.00	27715450.18	27715450.42	0.0068	0.0054
Earth	71250-02-18 18:15 G	27744637.01	27744637.26	27744637.53	0.0080	0.0017
Moon	71250-02-18 21:51 G	27744637.16	27744637.41	27744637.67	0.0080	0.0016 *
Mercury	71250-05-23 03:36 G	27744730.56	27744730.65	27744730.76	0.0080	0.0063
Mercury	71250-08-19 05:46 G	27744818.60	27744818.74	27744818.88	0.0080	0.0041
Venus	71250-08-29 20:24 G	27744829.18	27744829.35	27744829.55	0.0080	0.0042
Mercury	71250-11-15 07:27 G	27744906.65	27744906.81	27744906.97	0.0080	0.0020
Mercury	71251-02-11 09:07 G	27744994.72	27744994.88	27744995.05	0.0079	0.0002
Venus	71251-04-12 06:43 G	27745054.59	27745054.78	27745055.00	0.0079	0.0026
Mercury	71251-05-10 10:48 G	27745082.80	27745082.95	27745083.11	0.0079	0.0022
Mercury	71251-08-06 12:29 G	27745170.90	27745171.02	27745171.17	0.0079	0.0043
Mercury	71251-11-02 14:10 G	27745259.01	27745259.09	27745259.20	0.0079	0.0064
Mercury	71407-07-31 08:53 G	27802141.87	27802141.87	27802141.88	0.0064	0.0064
Earth	71407-08-22 03:22 G	27802163.38	27802163.64	27802163.89	0.0064	0.0007
Moon	71407-08-22 06:43 G	27802163.54	27802163.78	27802164.04	0.0064	0.0007 *
Mercury	71407-10-27 09:22 G	27802229.82	27802229.89	27802229.99	0.0064	0.0054
Mercury	71408-01-23 10:19 G	27802317.82	27802317.93	27802318.05	0.0064	0.0043
Mercury	71408-04-20 10:48 G	27802405.83	27802405.95	27802406.10	0.0065	0.0033
Venus	71408-06-17 09:51 G	27802463.74	27802463.91	27802464.11	0.0065	0.0036
Mercury	71408-07-17 11:46 G	27802493.85	27802493.99	27802494.15	0.0065	0.0022
Mercury	71408-10-13 12:43 G	27802581.88	27802582.03	27802582.18	0.0065	0.0011
Mercury	71409-01-09 13:27 G	27802669.91	27802670.06	27802670.22	0.0065	0.0002
Venus	71409-01-28 14:39 G	27802688.89	27802689.11	27802689.33	0.0065	0.0001
Mercury	71409-04-07 14:24 G	27802757.94	27802758.10	27802758.25	0.0065	0.0011
Mercury	71409-07-04 14:53 G	27802845.98	27802846.12	27802846.27	0.0065	0.0022
Venus	71409-09-10 18:29 G	27802914.11	27802914.27	27802914.47	0.0065	0.0037
Mercury	71409-09-30 15:36 G	27802934.03	27802934.15	27802934.29	0.0065	0.0033

Mercury	71409-12-27 16:19 G	27803022.08	27803022.18	27803022.30	0.0065	0.0044
Mercury	71410-03-25 17:03 G	27803110.15	27803110.21	27803110.31	0.0065	0.0055
Mars	71416-08-14 20:39 G	27805444.05	27805444.36	27805444.71	0.0068	0.0018
Moon	71496-02-22 03:07 G	27834489.48	27834489.63	27834489.82	0.0080	0.0062
Earth	71496-02-22 04:19 G	27834489.54	27834489.68	27834489.87	0.0080	0.0061 *
Mercury	71496-07-16 15:36 G	27834635.09	27834635.15	27834635.25	0.0080	0.0069
Venus	71496-09-28 21:22 G	27834709.32	27834709.39	27834709.49	0.0080	0.0073
Mercury	71496-10-12 17:31 G	27834723.11	27834723.23	27834723.37	0.0080	0.0048
Mercury	71497-01-08 19:12 G	27834811.16	27834811.30	27834811.47	0.0080	0.0027
Mercury	71497-04-06 21:22 G	27834899.23	27834899.39	27834899.55	0.0079	0.0005
Venus	71497-05-12 08:10 G	27834934.62	27834934.84	27834935.06	0.0079	0.0006
Mercury	71497-07-03 22:48 G	27834987.30	27834987.45	27834987.62	0.0079	0.0017
Mercury	71497-09-30 00:29 G	27835075.39	27835075.52	27835075.68	0.0079	0.0037
Venus	71497-12-23 18:00 G	27835160.13	27835160.25	27835160.41	0.0079	0.0061
Mercury	71497-12-27 02:10 G	27835163.50	27835163.59	27835163.72	0.0079	0.0058
Mercury	71498-03-25 04:05 G	27835251.67	27835251.67	27835251.69	0.0079	0.0079
Moon	71653-08-23 19:41 G	27892016.10	27892016.32	27892016.60	0.0064	0.0022
Earth	71653-08-23 20:24 G	27892016.13	27892016.35	27892016.61	0.0064	0.0022 *
Mercury	71653-09-22 21:51 G	27892046.41	27892046.41	27892046.43	0.0064	0.0064
Mercury	71653-12-19 22:19 G	27892134.37	27892134.43	27892134.54	0.0064	0.0054
Mercury	71654-03-17 23:17 G	27892222.37	27892222.47	27892222.60	0.0064	0.0043
Mercury	71654-06-14 00:15 G	27892310.38	27892310.51	27892310.65	0.0065	0.0032
Venus	71654-07-17 13:27 G	27892343.95	27892344.06	27892344.21	0.0065	0.0052
Mercury	71654-09-10 01:12 G	27892398.40	27892398.55	27892398.69	0.0065	0.0021
Mercury	71654-12-07 01:41 G	27892486.43	27892486.57	27892486.73	0.0065	0.0011
Venus	71655-02-27 18:00 G	27892569.04	27892569.25	27892569.47	0.0065	0.0016
Mercury	71655-03-05 02:39 G	27892574.46	27892574.61	27892574.77	0.0065	0.0001
Mercury	71655-06-01 03:22 G	27892662.49	27892662.64	27892662.79	0.0065	0.0012
Mercury	71655-08-28 04:05 G	27892750.53	27892750.67	27892750.82	0.0065	0.0022
Venus	71655-10-10 22:05 G	27892794.22	27892794.42	27892794.64	0.0065	0.0020

Mercury	71655-11-24 04:48 G	27892838.58	27892838.70	27892838.84	0.0065	0.0033
Mercury	71656-02-20 05:31 G	27892926.63	27892926.73	27892926.85	0.0065	0.0044
Mercury	71656-05-18 06:15 G	27893014.69	27893014.76	27893014.85	0.0065	0.0055
Venus	71656-05-23 02:24 G	27893019.51	27893019.60	27893019.73	0.0065	0.0057
Mars	71663-01-06 03:07 G	27895438.32	27895438.63	27895438.96	0.0068	0.0025
Mercury	71742-09-10 04:34 G	27924539.62	27924539.69	27924539.77	0.0080	0.0069
Mercury	71742-12-07 06:15 G	27924627.64	27924627.76	27924627.89	0.0080	0.0048
Mercury	71743-03-05 08:10 G	27924715.69	27924715.84	27924715.99	0.0080	0.0027
Mercury	71743-06-01 09:51 G	27924803.75	27924803.91	27924804.08	0.0080	0.0006
Venus	71743-06-12 10:48 G	27924814.75	27924814.95	27924815.16	0.0080	0.0030
Mercury	71743-08-28 11:31 G	27924891.83	27924891.98	27924892.15	0.0079	0.0016
Mercury	71743-11-24 13:12 G	27924979.92	27924980.05	27924980.20	0.0079	0.0037
Venus	71744-01-23 21:07 G	27925040.20	27925040.38	27925040.59	0.0079	0.0037
Mercury	71744-02-20 14:53 G	27925068.02	27925068.12	27925068.24	0.0079	0.0057
Mercury	71744-05-18 16:34 G	27925156.18	27925156.19	27925156.23	0.0079	0.0078
Moon	71899-08-27 14:53 G	27981868.90	27981869.12	27981869.37	0.0064	0.0022
Earth	71899-08-27 18:00 G	27981869.04	27981869.25	27981869.51	0.0064	0.0025 *
Mercury	71899-11-17 11:46 G	27981950.94	27981950.99	27981951.07	0.0064	0.0057
Mercury	71900-02-13 12:43 G	27982038.93	27982039.03	27982039.14	0.0064	0.0047
Mercury	71900-05-12 13:27 G	27982126.94	27982127.06	27982127.20	0.0064	0.0036
Mercury	71900-08-08 14:10 G	27982214.96	27982215.09	27982215.24	0.0065	0.0025
Venus	71900-08-17 19:55 G	27982224.26	27982224.33	27982224.42	0.0065	0.0060
Mercury	71900-11-04 14:53 G	27982302.98	27982303.12	27982303.28	0.0065	0.0015
Mercury	71901-01-31 15:51 G	27982391.01	27982391.16	27982391.32	0.0065	0.0004
Venus	71901-03-31 00:00 G	27982449.31	27982449.50	27982449.72	0.0065	0.0025
Mercury	71901-04-29 16:34 G	27982479.04	27982479.19	27982479.35	0.0065	0.0007
Mercury	71901-07-26 17:17 G	27982567.08	27982567.22	27982567.37	0.0065	0.0018
Mercury	71901-10-22 18:00 G	27982655.12	27982655.25	27982655.40	0.0065	0.0029
Venus	71901-11-11 04:19 G	27982674.48	27982674.68	27982674.91	0.0065	0.0012
Mercury	71902-01-18 18:43 G	27982743.17	27982743.28	27982743.41	0.0065	0.0040

Mercury	71902-04-16 19:27 G	27982831.23	27982831.31	27982831.42	0.0065	0.0051
Venus	71902-06-24 08:39 G	27982899.74	27982899.86	27982900.03	0.0065	0.0049
Mercury	71902-07-13 20:10 G	27982919.31	27982919.34	27982919.40	0.0065	0.0062
Mercury	71988-11-03 18:15 G	28014444.17	28014444.26	28014444.37	0.0080	0.0062
Mercury	71989-01-30 19:55 G	28014532.21	28014532.33	28014532.48	0.0080	0.0041
Mercury	71989-04-28 21:51 G	28014620.26	28014620.41	28014620.57	0.0080	0.0020
Venus	71989-07-12 16:48 G	28014695.02	28014695.20	28014695.39	0.0080	0.0044
Mercury	71989-07-25 23:46 G	28014708.33	28014708.49	28014708.65	0.0080	0.0002
Mercury	71989-10-22 01:27 G	28014796.41	28014796.56	28014796.72	0.0079	0.0023
Mercury	71990-01-18 03:07 G	28014884.50	28014884.63	28014884.77	0.0079	0.0044
Venus	71990-02-23 02:53 G	28014920.42	28014920.62	28014920.84	0.0079	0.0023
Mercury	71990-04-16 04:48 G	28014972.61	28014972.70	28014972.80	0.0079	0.0064
Mars	71995-01-11 17:31 G	28016703.96	28016704.23	28016704.52	0.0077	0.0023

# 73RD MILLENNIUM CE

This is a list of transits visible from Pluto in the 73rd millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Earth	72145-08-30 17:03 G		28071721.98	28071722.21	28071722.46	0.0064	0.0023	
Moon	72145-08-30 18:58 G		28071722.07	28071722.29	28071722.55	0.0064	0.0021	*
Mercury	72145-10-15 00:58 G		28071767.51	28071767.54	28071767.62	0.0064	0.0061	
Mercury	72146-01-11 01:55 G		28071855.50	28071855.58	28071855.70	0.0064	0.0050	
Mercury	72146-04-09 02:53 G		28071943.51	28071943.62	28071943.75	0.0064	0.0039	

Mercury	72146-07-06 03:51 G	28072031.52	28072031.66	28072031.80	0.0064	0.0028
Mercury	72146-10-02 04:34 G	28072119.54	28072119.69	28072119.84	0.0065	0.0017
Mercury	72146-12-29 05:17 G	28072207.57	28072207.72	28072207.88	0.0065	0.0007
Mercury	72147-03-27 06:15 G	28072295.60	28072295.76	28072295.91	0.0065	0.0005
Venus	72147-04-30 07:12 G	28072329.62	28072329.80	28072330.01	0.0065	0.0031
Mercury	72147-06-23 06:43 G	28072383.64	28072383.78	28072383.94	0.0065	0.0016
Mercury	72147-09-19 07:27 G	28072471.68	28072471.81	28072471.96	0.0065	0.0027
Venus	72147-12-11 11:46 G	28072554.78	28072554.99	28072555.21	0.0065	0.0005
Mercury	72147-12-16 08:39 G	28072559.73	28072559.86	28072559.98	0.0065	0.0037
Mercury	72148-03-13 09:07 G	28072647.79	28072647.88	28072647.99	0.0065	0.0049
Mercury	72148-06-09 09:51 G	28072735.86	28072735.91	28072735.98	0.0065	0.0060
Venus	72148-07-23 16:05 G	28072780.01	28072780.17	28072780.35	0.0065	0.0042
Mercury	72234-10-02 06:43 G	28104260.72	28104260.78	28104260.88	0.0080	0.0070
Mercury	72234-12-29 08:39 G	28104348.75	28104348.86	28104349.00	0.0080	0.0049
Earth	72235-03-05 14:10 G	28104415.07	28104415.09	28104415.18	0.0080	0.0078
Mercury	72235-03-27 10:19 G	28104436.79	28104436.93	28104437.10	0.0080	0.0028
Mercury	72235-06-23 12:15 G	28104524.86	28104525.01	28104525.18	0.0080	0.0007
Venus	72235-08-13 00:15 G	28104575.35	28104575.51	28104575.69	0.0080	0.0051
Mercury	72235-09-19 14:10 G	28104612.93	28104613.09	28104613.25	0.0080	0.0015
Mercury	72235-12-16 15:51 G	28104701.02	28104701.16	28104701.31	0.0079	0.0036
Mercury	72236-03-13 17:31 G	28104789.12	28104789.23	28104789.35	0.0079	0.0057
Venus	72236-03-25 10:34 G	28104800.73	28104800.94	28104801.16	0.0079	0.0016
Mercury	72236-06-09 19:12 G	28104877.28	28104877.30	28104877.34	0.0079	0.0078
Mars	72241-06-06 08:10 G	28106699.76	28106699.84	28106700.00	0.0076	0.0070
Earth	72391-09-03 19:27 G	28161575.07	28161575.31	28161575.58	0.0064	0.0011
Moon	72391-09-03 22:19 G	28161575.17	28161575.43	28161575.69	0.0064	0.0006 *
Mercury	72391-09-12 15:36 G	28161584.09	28161584.15	28161584.23	0.0064	0.0057
Mercury	72391-12-09 16:05 G	28161672.08	28161672.17	28161672.30	0.0064	0.0047
Mercury	72392-03-06 17:03 G	28161760.09	28161760.21	28161760.35	0.0064	0.0036
Mercury	72392-06-02 18:00 G	28161848.11	28161848.25	28161848.40	0.0064	0.0025

Mercury	72392-08-29 18:43 G	28161936.14	28161936.28	28161936.44	0.0065	0.0014
Mercury	72392-11-25 19:41 G	28162024.17	28162024.32	28162024.48	0.0065	0.0003
Mercury	72393-02-21 20:24 G	28162112.20	28162112.35	28162112.51	0.0065	0.0008
Mercury	72393-05-20 21:07 G	28162200.24	28162200.38	28162200.53	0.0065	0.0019
Venus	72393-05-30 16:34 G	28162210.02	28162210.19	28162210.41	0.0065	0.0030
Mercury	72393-08-16 21:51 G	28162288.28	28162288.41	28162288.56	0.0065	0.0030
Mercury	72393-11-12 22:34 G	28162376.33	28162376.44	28162376.57	0.0065	0.0041
Venus	72394-01-10 21:22 G	28162435.18	28162435.39	28162435.61	0.0065	0.0007
Mercury	72394-02-08 23:17 G	28162464.39	28162464.47	28162464.58	0.0065	0.0052
Mercury	72394-05-08 00:00 G	28162552.48	28162552.50	28162552.55	0.0065	0.0063
Venus	72394-08-24 01:27 G	28162660.42	28162660.56	28162660.74	0.0065	0.0044
Mercury	72480-08-28 21:07 G	28194077.30	28194077.38	28194077.46	0.0080	0.0068
Mercury	72480-11-24 22:48 G	28194165.32	28194165.45	28194165.58	0.0080	0.0046
Mercury	72481-02-21 00:29 G	28194253.37	28194253.52	28194253.68	0.0080	0.0025
Mercury	72481-05-20 02:10 G	28194341.44	28194341.59	28194341.76	0.0080	0.0005
Mercury	72481-08-16 04:05 G	28194429.51	28194429.67	28194429.83	0.0080	0.0017
Jupiter	72481-08-17 00:00 G	28194430.07	28194430.50	28194431.05	0.0080	0.0043
Venus	72481-09-11 10:48 G	28194455.79	28194455.95	28194456.15	0.0079	0.0046
Mercury	72481-11-12 05:31 G	28194517.60	28194517.73	28194517.88	0.0079	0.0038
Mercury	72482-02-08 07:12 G	28194605.71	28194605.80	28194605.92	0.0079	0.0059
Venus	72482-04-24 21:22 G	28194681.18	28194681.39	28194681.61	0.0079	0.0022
Mercury	72637-08-10 05:31 G	28251400.66	28251400.73	28251400.83	0.0064	0.0054
Moon	72637-09-06 18:43 G	28251428.02	28251428.28	28251428.54	0.0064	0.0005
Earth	72637-09-06 21:51 G	28251428.16	28251428.41	28251428.67	0.0064	0.0002 *
Mercury	72637-11-06 06:29 G	28251488.66	28251488.77	28251488.89	0.0064	0.0044
Mercury	72638-02-02 07:27 G	28251576.68	28251576.81	28251576.95	0.0064	0.0033
Mercury	72638-05-01 08:10 G	28251664.70	28251664.84	28251664.99	0.0064	0.0022
Mercury	72638-07-28 08:53 G	28251752.72	28251752.87	28251753.03	0.0065	0.0011
Mercury	72638-10-24 09:51 G	28251840.75	28251840.91	28251841.06	0.0065	0.0000
Venus	72638-11-17 21:22 G	28251865.39	28251865.39	28251865.42	0.0065	0.0065

Mercury	72639-01-20 10:34 G	28251928.79	28251928.94	28251929.10	0.0065	0.0011
Mercury	72639-04-18 11:03 G	28252016.83	28252016.96	28252017.12	0.0065	0.0022
Venus	72639-07-01 01:41 G	28252090.39	28252090.57	28252090.79	0.0065	0.0029
Mercury	72639-07-15 11:46 G	28252104.87	28252104.99	28252105.14	0.0065	0.0033
Mercury	72639-10-11 12:58 G	28252192.93	28252193.04	28252193.15	0.0065	0.0043
Mercury	72640-01-07 13:41 G	28252280.99	28252281.07	28252281.16	0.0065	0.0054
Venus	72640-02-11 06:29 G	28252315.55	28252315.77	28252315.99	0.0065	0.0008
Venus	72640-09-23 10:34 G	28252540.80	28252540.94	28252541.12	0.0065	0.0044
Mars	72646-09-17 06:15 G	28254725.43	28254725.76	28254726.09	0.0068	0.0018
Earth	72726-03-10 14:39 G	28283754.02	28283754.11	28283754.27	0.0080	0.0071
Moon	72726-03-10 15:22 G	28283754.06	28283754.14	28283754.27	0.0080	0.0073 *
Mercury	72726-07-28 10:48 G	28283893.87	28283893.95	28283894.06	0.0080	0.0065
Mercury	72726-10-24 12:43 G	28283981.90	28283982.03	28283982.17	0.0080	0.0043
Mercury	72727-01-20 14:24 G	28284069.95	28284070.10	28284070.26	0.0080	0.0022
Mercury	72727-04-18 16:19 G	28284158.02	28284158.18	28284158.34	0.0080	0.0001
Mercury	72727-07-15 17:46 G	28284246.10	28284246.24	28284246.41	0.0080	0.0021
Mercury	72727-10-11 19:27 G	28284334.19	28284334.31	28284334.46	0.0079	0.0042
Venus	72727-10-13 21:51 G	28284336.24	28284336.41	28284336.63	0.0079	0.0039
Mercury	72728-01-07 21:07 G	28284422.30	28284422.38	28284422.49	0.0079	0.0062
Venus	72728-05-26 08:39 G	28284561.65	28284561.86	28284562.06	0.0079	0.0029
Mercury	72883-04-10 19:41 G	28341129.27	28341129.32	28341129.40	0.0064	0.0058
Mercury	72883-07-07 20:39 G	28341217.26	28341217.36	28341217.48	0.0064	0.0047
Moon	72883-09-10 01:41 G	28341281.37	28341281.57	28341281.82	0.0064	0.0027
Earth	72883-09-10 03:22 G	28341281.41	28341281.64	28341281.88	0.0064	0.0024 *
Mercury	72883-10-03 21:22 G	28341305.27	28341305.39	28341305.53	0.0064	0.0036
Mercury	72883-12-30 22:05 G	28341393.29	28341393.42	28341393.58	0.0064	0.0026
Mercury	72884-03-27 23:03 G	28341481.31	28341481.46	28341481.62	0.0065	0.0015
Mercury	72884-06-24 00:00 G	28341569.34	28341569.50	28341569.66	0.0065	0.0004
Mercury	72884-09-20 00:43 G	28341657.38	28341657.53	28341657.69	0.0065	0.0007
Mercury	72884-12-17 01:27 G	28341745.41	28341745.56	28341745.71	0.0065	0.0018

Venus	72884-12-17 08:39 G	28341745.79	28341745.86	28341745.98	0.0065	0.0058
Mercury	72885-03-15 02:10 G	28341833.46	28341833.59	28341833.74	0.0065	0.0029
Mercury	72885-06-11 02:53 G	28341921.51	28341921.62	28341921.75	0.0065	0.0040
Venus	72885-07-30 13:12 G	28341970.86	28341971.05	28341971.27	0.0065	0.0022
Mercury	72885-09-07 03:36 G	28342009.57	28342009.65	28342009.76	0.0065	0.0051
Mercury	72885-12-04 04:19 G	28342097.65	28342097.68	28342097.74	0.0065	0.0062
Venus	72886-03-12 17:46 G	28342196.03	28342196.24	28342196.46	0.0065	0.0015
Venus	72886-10-23 21:51 G	28342421.30	28342421.41	28342421.57	0.0065	0.0052
Earth	72972-03-12 22:19 G	28373607.21	28373607.43	28373607.69	0.0080	0.0033
Moon	72972-03-13 01:55 G	28373607.36	28373607.58	28373607.84	0.0080	0.0034 *
Mercury	72972-03-28 00:15 G	28373622.46	28373622.51	28373622.57	0.0080	0.0074
Mercury	72972-06-24 01:55 G	28373710.47	28373710.58	28373710.71	0.0080	0.0053
Mercury	72972-09-20 03:36 G	28373798.51	28373798.65	28373798.81	0.0080	0.0032
Mercury	72972-12-17 05:31 G	28373886.57	28373886.73	28373886.89	0.0080	0.0011
Mercury	72973-03-15 07:12 G	28373974.64	28373974.80	28373974.96	0.0080	0.0010
Mercury	72973-06-11 08:53 G	28374062.73	28374062.87	28374063.02	0.0080	0.0031
Mercury	72973-09-07 10:34 G	28374150.82	28374150.94	28374151.07	0.0079	0.0052
Venus	72973-11-12 12:00 G	28374216.79	28374217.00	28374217.21	0.0079	0.0022
Mercury	72973-12-04 12:15 G	28374238.95	28374239.01	28374239.08	0.0079	0.0073
Venus	72974-06-25 21:36 G	28374442.24	28374442.40	28374442.61	0.0079	0.0045
Mars	72978-09-26 06:43 G	28375995.50	28375995.78	28375996.08	0.0077	0.0017

# 74TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 74th millennium CE.

PLANET	MAX-	C	START	MAX	END	SUNRAD	DEPTH	S
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## TRANSIT

## TIME

Moon	73128-09-12 16:48 G	28430768.09	28430768.20	28430768.37	0.0064	0.0054
Earth	73128-09-12 20:10 G	28430768.20	28430768.34	28430768.49	0.0064	0.0052 *
Mercury	73128-12-11 09:22 G	28430857.88	28430857.89	28430857.94	0.0064	0.0063
Mercury	73129-03-09 10:05 G	28430945.85	28430945.92	28430946.03	0.0064	0.0053
Mercury	73129-06-05 11:03 G	28431033.85	28431033.96	28431034.09	0.0064	0.0042
Mercury	73129-09-01 12:00 G	28431121.87	28431122.00	28431122.14	0.0064	0.0031
Earth	73129-09-14 06:29 G	28431134.61	28431134.77	28431135.00	0.0064	0.0042
Moon	73129-09-14 10:34 G	28431134.76	28431134.94	28431135.14	0.0064	0.0043 *
Mercury	73129-11-28 12:58 G	28431209.89	28431210.04	28431210.19	0.0064	0.0020
Mercury	73130-02-24 13:41 G	28431297.92	28431298.07	28431298.23	0.0065	0.0009
Mercury	73130-05-23 14:24 G	28431385.95	28431386.10	28431386.26	0.0065	0.0002
Mercury	73130-08-19 15:07 G	28431473.98	28431474.13	28431474.29	0.0065	0.0013
Mercury	73130-11-15 15:51 G	28431562.03	28431562.16	28431562.32	0.0065	0.0024
Venus	73131-01-18 19:12 G	28431626.20	28431626.30	28431626.44	0.0065	0.0054
Mercury	73131-02-11 16:34 G	28431650.07	28431650.19	28431650.33	0.0065	0.0035
Mercury	73131-05-10 17:17 G	28431738.13	28431738.22	28431738.35	0.0065	0.0046
Mercury	73131-08-06 18:29 G	28431826.20	28431826.27	28431826.34	0.0065	0.0056
Venus	73131-08-31 23:31 G	28431851.29	28431851.48	28431851.71	0.0065	0.0019
Venus	73132-04-13 04:19 G	28432076.47	28432076.68	28432076.89	0.0065	0.0019
Venus	73132-11-24 08:24 G	28432301.75	28432301.85	28432301.98	0.0066	0.0056
Mercury	73218-02-23 14:53 G	28463439.04	28463439.12	28463439.21	0.0080	0.0067
Moon	73218-03-17 02:53 G	28463460.35	28463460.62	28463460.89	0.0080	0.0001
Earth	73218-03-17 04:34 G	28463460.43	28463460.69	28463460.95	0.0080	0.0001 *
Mercury	73218-05-22 16:34 G	28463527.07	28463527.19	28463527.33	0.0080	0.0046
Mercury	73218-08-18 18:29 G	28463615.12	28463615.27	28463615.42	0.0080	0.0024
Mercury	73218-11-14 20:10 G	28463703.18	28463703.34	28463703.50	0.0080	0.0003
Mercury	73219-02-10 21:51 G	28463791.26	28463791.41	28463791.57	0.0080	0.0018
Venus	73219-05-02 13:55 G	28463872.04	28463872.08	28463872.16	0.0080	0.0077

Mercury	73219-05-09 23:31 G	28463879.34	28463879.48	28463879.62	0.0080	0.0039
Mercury	73219-08-06 01:12 G	28463967.45	28463967.55	28463967.66	0.0079	0.0060
Venus	73219-12-14 00:43 G	28464097.32	28464097.53	28464097.76	0.0079	0.0010
Venus	73220-07-26 10:48 G	28464322.81	28464322.95	28464323.11	0.0079	0.0057
Mercury	73374-08-12 00:00 G	28520586.50	28520586.50	28520586.50	0.0064	0.0064
Moon	73374-09-16 00:43 G	28520621.32	28520621.53	28520621.77	0.0064	0.0027
Earth	73374-09-16 02:24 G	28520621.38	28520621.60	28520621.84	0.0064	0.0026 *
Mercury	73374-11-08 00:43 G	28520674.45	28520674.53	28520674.62	0.0064	0.0053
Mercury	73375-02-04 01:41 G	28520762.45	28520762.57	28520762.68	0.0064	0.0043
Mercury	73375-05-03 02:10 G	28520850.46	28520850.59	28520850.74	0.0064	0.0032
Mercury	73375-07-30 02:53 G	28520938.49	28520938.62	28520938.78	0.0064	0.0022
Mercury	73375-10-26 03:51 G	28521026.51	28521026.66	28521026.82	0.0064	0.0011
Mercury	73376-01-22 04:48 G	28521114.54	28521114.70	28521114.86	0.0065	0.0001
Mercury	73376-04-19 05:31 G	28521202.58	28521202.73	28521202.89	0.0065	0.0012
Mercury	73376-07-16 06:15 G	28521290.62	28521290.76	28521290.91	0.0065	0.0023
Mercury	73376-10-12 07:12 G	28521378.67	28521378.80	28521378.93	0.0065	0.0033
Mercury	73377-01-08 07:55 G	28521466.72	28521466.83	28521466.95	0.0065	0.0044
Venus	73377-02-17 07:12 G	28521506.66	28521506.80	28521506.98	0.0065	0.0044
Mercury	73377-04-06 08:39 G	28521554.79	28521554.86	28521554.95	0.0065	0.0055
Venus	73377-09-30 11:46 G	28521731.78	28521731.99	28521732.22	0.0065	0.0008
Venus	73378-05-13 16:05 G	28521956.99	28521957.17	28521957.39	0.0065	0.0030
Mars	73384-01-05 02:10 G	28524019.29	28524019.59	28524019.93	0.0068	0.0025
Mercury	73463-10-26 04:34 G	28553167.63	28553167.69	28553167.76	0.0080	0.0073
Mercury	73464-01-22 06:15 G	28553255.65	28553255.76	28553255.89	0.0080	0.0052
Moon	73464-03-20 10:48 G	28553313.76	28553313.95	28553314.17	0.0080	0.0048
Earth	73464-03-20 13:41 G	28553313.88	28553314.07	28553314.31	0.0080	0.0046 *
Mercury	73464-04-19 08:10 G	28553343.69	28553343.84	28553343.99	0.0080	0.0030
Mercury	73464-07-16 09:51 G	28553431.75	28553431.91	28553432.07	0.0080	0.0009
Mercury	73464-10-12 11:31 G	28553519.82	28553519.98	28553520.14	0.0080	0.0012
Mercury	73465-01-08 13:12 G	28553607.91	28553608.05	28553608.20	0.0080	0.0033

Mercury	73465-04-06 14:39 G	28553696.01	28553696.11	28553696.24	0.0080	0.0054
Venus	73465-06-02 04:48 G	28553752.57	28553752.70	28553752.89	0.0079	0.0055
Mercury	73465-07-03 16:19 G	28553784.14	28553784.18	28553784.25	0.0079	0.0075
Venus	73466-01-13 15:36 G	28553977.94	28553978.15	28553978.38	0.0079	0.0013
Venus	73466-08-27 01:55 G	28554203.56	28554203.58	28554203.60	0.0079	0.0078
Mercury	73620-07-09 14:39 G	28610403.05	28610403.11	28610403.20	0.0064	0.0056
Earth	73620-09-19 08:10 G	28610474.59	28610474.84	28610475.10	0.0064	0.0004
Moon	73620-09-19 11:31 G	28610474.73	28610474.98	28610475.24	0.0064	0.0003 *
Mercury	73620-10-05 15:36 G	28610491.05	28610491.15	28610491.27	0.0064	0.0046
Mercury	73621-01-01 16:05 G	28610579.06	28610579.17	28610579.32	0.0064	0.0036
Mercury	73621-03-30 17:03 G	28610667.08	28610667.21	28610667.37	0.0064	0.0025
Mercury	73621-06-26 18:00 G	28610755.10	28610755.25	28610755.41	0.0064	0.0013
Mercury	73621-09-22 18:58 G	28610843.13	28610843.29	28610843.45	0.0064	0.0003
Mercury	73621-12-19 19:41 G	28610931.17	28610931.32	28610931.48	0.0065	0.0008
Mercury	73622-03-17 20:10 G	28611019.21	28611019.34	28611019.50	0.0065	0.0020
Mercury	73622-06-13 21:22 G	28611107.25	28611107.39	28611107.53	0.0065	0.0030
Mercury	73622-09-09 22:05 G	28611195.30	28611195.42	28611195.54	0.0065	0.0041
Mercury	73622-12-06 22:48 G	28611283.36	28611283.45	28611283.55	0.0065	0.0052
Mercury	73623-03-04 23:31 G	28611371.45	28611371.48	28611371.52	0.0065	0.0063
Venus	73623-03-20 18:58 G	28611387.11	28611387.29	28611387.48	0.0065	0.0036
Venus	73623-10-31 23:17 G	28611612.25	28611612.47	28611612.70	0.0065	0.0001
Venus	73624-06-13 03:51 G	28611837.48	28611837.66	28611837.85	0.0065	0.0037
Mercury	73709-09-22 19:27 G	28642984.22	28642984.31	28642984.42	0.0080	0.0062
Mercury	73709-12-19 21:22 G	28643072.26	28643072.39	28643072.53	0.0080	0.0040
Mercury	73710-03-17 23:03 G	28643160.31	28643160.46	28643160.62	0.0080	0.0019
Mercury	73710-06-14 00:43 G	28643248.38	28643248.53	28643248.69	0.0080	0.0003
Mercury	73710-09-10 02:24 G	28643336.45	28643336.60	28643336.76	0.0080	0.0023
Mercury	73710-12-07 04:05 G	28643424.54	28643424.67	28643424.81	0.0080	0.0044
Mercury	73711-03-05 05:46 G	28643512.66	28643512.74	28643512.84	0.0080	0.0065
Venus	73711-07-03 18:58 G	28643633.10	28643633.29	28643633.49	0.0079	0.0037

Venus	73712-02-14 05:03 G	28643858.52	28643858.71	28643858.93	0.0079	0.0030
Mars	73716-01-17 20:53 G	28645292.09	28645292.37	28645292.66	0.0077	0.0016
Mercury	73866-03-11 05:17 G	28700131.66	28700131.72	28700131.82	0.0064	0.0055
Mercury	73866-06-07 06:15 G	28700219.66	28700219.76	28700219.88	0.0064	0.0044
Mercury	73866-09-03 06:58 G	28700307.67	28700307.79	28700307.94	0.0064	0.0034
Earth	73866-09-23 16:34 G	28700327.97	28700328.19	28700328.43	0.0064	0.0027
Moon	73866-09-23 16:19 G	28700327.97	28700328.18	28700328.44	0.0064	0.0030 *
Mercury	73866-11-30 07:55 G	28700395.69	28700395.83	28700395.98	0.0064	0.0023
Mercury	73867-02-26 08:53 G	28700483.71	28700483.87	28700484.02	0.0064	0.0012
Mercury	73867-05-25 09:36 G	28700571.74	28700571.90	28700572.06	0.0064	0.0001
Mercury	73867-08-21 10:19 G	28700659.78	28700659.93	28700660.09	0.0065	0.0010
Mercury	73867-11-17 11:17 G	28700747.82	28700747.97	28700748.12	0.0065	0.0021
Mercury	73868-02-13 11:46 G	28700835.87	28700835.99	28700836.14	0.0065	0.0032
Mercury	73868-05-11 12:29 G	28700923.92	28700924.02	28700924.15	0.0065	0.0043
Mercury	73868-08-07 13:12 G	28701011.98	28701012.05	28701012.16	0.0065	0.0054
Venus	73868-09-07 03:36 G	28701042.58	28701042.65	28701042.76	0.0065	0.0059
Mercury	73868-11-03 14:24 G	28701100.10	28701100.10	28701100.11	0.0065	0.0065
Venus	73869-04-20 07:55 G	28701267.64	28701267.83	28701268.05	0.0065	0.0023
Venus	73869-12-01 12:29 G	28701492.82	28701493.02	28701493.25	0.0065	0.0014
Venus	73870-07-14 16:34 G	28701718.09	28701718.19	28701718.36	0.0066	0.0052
Mars	73874-11-30 20:10 G	28703318.28	28703318.34	28703318.47	0.0067	0.0065
Moon	73955-03-27 01:27 G	28732653.38	28732653.56	28732653.78	0.0080	0.0050
Earth	73955-03-27 04:48 G	28732653.49	28732653.70	28732653.92	0.0080	0.0046 *
Mercury	73955-05-25 10:05 G	28732712.83	28732712.92	28732713.03	0.0080	0.0062
Mercury	73955-08-21 11:46 G	28732800.86	28732800.99	28732801.13	0.0080	0.0041
Mercury	73955-11-17 13:41 G	28732888.91	28732889.07	28732889.22	0.0080	0.0019
Mercury	73956-02-13 15:22 G	28732976.98	28732977.14	28732977.30	0.0080	0.0002
Mercury	73956-05-11 16:48 G	28733065.06	28733065.20	28733065.36	0.0080	0.0023
Mercury	73956-08-07 18:29 G	28733153.15	28733153.27	28733153.41	0.0080	0.0044
Mercury	73956-11-03 19:55 G	28733241.26	28733241.33	28733241.44	0.0080	0.0065

Venus	73956-12-21 01:27 G	28733288.51	28733288.56	28733288.65	0.0079	0.0076
Venus	73957-08-03 12:15 G	28733513.79	28733514.01	28733514.23	0.0079	0.0008
Venus	73958-03-16 22:05 G	28733739.28	28733739.42	28733739.58	0.0079	0.0058

# 75TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 75th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Earth	74111-09-26 12:15 G		28789814.82	28789815.01	28789815.23	0.0064	0.0038	
Moon	74111-09-26 15:22 G		28789814.97	28789815.14	28789815.36	0.0064	0.0041	*
Mercury	74111-11-10 19:55 G		28789860.26	28789860.33	28789860.41	0.0064	0.0055	
Mercury	74112-02-06 20:24 G		28789948.25	28789948.35	28789948.48	0.0064	0.0045	
Mercury	74112-05-04 21:22 G		28790036.27	28790036.39	28790036.53	0.0064	0.0034	
Mercury	74112-07-31 22:19 G		28790124.29	28790124.43	28790124.58	0.0064	0.0023	
Moon	74112-09-26 19:55 G		28790181.24	28790181.33	28790181.46	0.0064	0.0058	
Earth	74112-09-26 23:31 G		28790181.35	28790181.48	28790181.62	0.0064	0.0055	*
Mercury	74112-10-27 23:03 G		28790212.31	28790212.46	28790212.62	0.0064	0.0013	
Mercury	74113-01-24 00:00 G		28790300.34	28790300.50	28790300.66	0.0064	0.0002	
Mercury	74113-04-22 00:43 G		28790388.38	28790388.53	28790388.69	0.0064	0.0010	
Mercury	74113-07-19 01:27 G		28790476.42	28790476.56	28790476.72	0.0065	0.0020	
Mercury	74113-10-15 02:10 G		28790564.47	28790564.59	28790564.74	0.0065	0.0032	
Mercury	74114-01-11 03:07 G		28790652.52	28790652.63	28790652.76	0.0065	0.0042	
Mercury	74114-04-09 03:51 G		28790740.58	28790740.66	28790740.76	0.0065	0.0053	

Mercury	74114-07-06 04:48 G	28790828.69	28790828.70	28790828.72	0.0065	0.0064
Venus	74114-10-08 16:19 G	28790923.04	28790923.18	28790923.33	0.0065	0.0048
Venus	74115-05-21 20:39 G	28791148.15	28791148.36	28791148.59	0.0065	0.0012
Venus	74116-01-02 00:58 G	28791373.35	28791373.54	28791373.76	0.0065	0.0026
Venus	74116-08-14 05:31 G	28791598.69	28791598.73	28791598.81	0.0066	0.0063
Mercury	74201-01-24 00:00 G	28822441.42	28822441.50	28822441.59	0.0080	0.0067
Earth	74201-03-30 15:07 G	28822506.87	28822507.13	28822507.39	0.0080	0.0003
Moon	74201-03-30 17:17 G	28822506.96	28822507.22	28822507.47	0.0080	0.0001 *
Mercury	74201-04-22 01:41 G	28822529.45	28822529.57	28822529.70	0.0080	0.0046
Mercury	74201-07-19 03:36 G	28822617.50	28822617.65	28822617.80	0.0080	0.0025
Mercury	74201-10-15 05:17 G	28822705.56	28822705.72	28822705.88	0.0080	0.0004
Mercury	74202-01-11 06:43 G	28822793.63	28822793.78	28822793.94	0.0080	0.0018
Mercury	74202-04-09 08:10 G	28822881.72	28822881.84	28822882.00	0.0080	0.0039
Mercury	74202-07-06 09:51 G	28822969.82	28822969.91	28822970.03	0.0080	0.0060
Venus	74203-01-21 17:03 G	28823169.06	28823169.21	28823169.39	0.0079	0.0052
Venus	74203-09-04 03:36 G	28823394.43	28823394.65	28823394.87	0.0079	0.0015
Mercury	74357-04-15 09:51 G	28879500.90	28879500.91	28879500.94	0.0064	0.0063
Mercury	74357-07-12 10:48 G	28879588.86	28879588.95	28879589.04	0.0064	0.0052
Earth	74357-09-29 22:05 G	28879668.16	28879668.42	28879668.68	0.0064	0.0004
Moon	74357-09-29 23:03 G	28879668.20	28879668.46	28879668.73	0.0064	0.0007 *
Mercury	74357-10-08 11:17 G	28879676.87	28879676.97	28879677.11	0.0064	0.0042
Mercury	74358-01-04 12:15 G	28879764.88	28879765.01	28879765.16	0.0064	0.0031
Mercury	74358-04-02 13:12 G	28879852.90	28879853.05	28879853.20	0.0064	0.0020
Mercury	74358-06-29 14:10 G	28879940.93	28879941.09	28879941.24	0.0064	0.0010
Mercury	74358-09-25 14:53 G	28880028.96	28880029.12	28880029.28	0.0064	0.0001
Mercury	74358-12-22 15:36 G	28880117.00	28880117.15	28880117.31	0.0064	0.0012
Mercury	74359-03-20 16:19 G	28880205.04	28880205.18	28880205.34	0.0065	0.0023
Mercury	74359-06-16 17:17 G	28880293.09	28880293.22	28880293.36	0.0065	0.0034
Mercury	74359-09-12 18:00 G	28880381.15	28880381.25	28880381.37	0.0065	0.0045
Mercury	74359-12-09 18:43 G	28880469.21	28880469.28	28880469.37	0.0065	0.0056

Venus	74360-11-08 06:15 G	28880803.57	28880803.76	28880803.95	0.0065	0.0033
Venus	74361-06-21 10:48 G	28881028.73	28881028.95	28881029.17	0.0065	0.0004
Venus	74362-02-01 14:53 G	28881253.97	28881254.12	28881254.31	0.0066	0.0042
Mercury	74446-09-24 14:39 G	28912170.03	28912170.11	28912170.22	0.0080	0.0064
Mercury	74446-12-21 16:34 G	28912258.06	28912258.19	28912258.33	0.0080	0.0042
Mercury	74447-03-19 18:15 G	28912346.11	28912346.26	28912346.42	0.0080	0.0021
Earth	74447-04-03 05:03 G	28912360.61	28912360.71	28912360.86	0.0080	0.0070
Moon	74447-04-03 07:27 G	28912360.68	28912360.81	28912360.99	0.0080	0.0066 *
Mercury	74447-06-15 19:55 G	28912434.17	28912434.33	28912434.49	0.0080	0.0001
Mercury	74447-09-11 21:36 G	28912522.25	28912522.40	28912522.56	0.0080	0.0021
Mercury	74447-12-08 23:03 G	28912610.34	28912610.46	28912610.61	0.0080	0.0042
Mercury	74448-03-06 00:43 G	28912698.45	28912698.53	28912698.64	0.0080	0.0063
Venus	74449-02-20 11:03 G	28913049.75	28913049.96	28913050.18	0.0079	0.0018
Venus	74449-10-03 20:53 G	28913275.21	28913275.37	28913275.56	0.0079	0.0049
Mercury	74602-12-16 00:15 G	28969229.50	28969229.51	28969229.54	0.0064	0.0063
Mercury	74603-03-14 00:43 G	28969317.47	28969317.53	28969317.64	0.0064	0.0053
Mercury	74603-06-10 01:41 G	28969405.47	28969405.57	28969405.71	0.0064	0.0042
Mercury	74603-09-06 02:39 G	28969493.48	28969493.61	28969493.76	0.0064	0.0031
Moon	74603-10-04 01:12 G	28969521.33	28969521.55	28969521.81	0.0064	0.0021
Earth	74603-10-04 04:48 G	28969521.49	28969521.70	28969521.96	0.0064	0.0024 *
Mercury	74603-12-03 03:36 G	28969581.50	28969581.65	28969581.80	0.0064	0.0021
Mercury	74604-02-29 04:34 G	28969669.53	28969669.69	28969669.84	0.0064	0.0010
Mercury	74604-05-27 05:17 G	28969757.56	28969757.72	28969757.88	0.0064	0.0001
Mercury	74604-08-23 06:00 G	28969845.60	28969845.75	28969845.91	0.0064	0.0012
Mercury	74604-11-19 06:58 G	28969933.64	28969933.79	28969933.94	0.0065	0.0023
Mercury	74605-02-15 07:41 G	28970021.69	28970021.82	28970021.96	0.0065	0.0034
Mercury	74605-05-14 08:24 G	28970109.75	28970109.85	28970109.97	0.0065	0.0045
Mercury	74605-08-10 09:07 G	28970197.81	28970197.88	28970197.97	0.0065	0.0056
Venus	74606-04-28 14:24 G	28970459.00	28970459.10	28970459.20	0.0065	0.0057
Venus	74606-12-09 18:15 G	28970684.07	28970684.26	28970684.49	0.0065	0.0022

Venus	74607-07-22 23:03 G	28970909.26	28970909.46	28970909.68	0.0065	0.0016
Venus	74608-03-04 03:22 G	28971134.53	28971134.64	28971134.78	0.0066	0.0054
Mars	74612-03-21 13:27 G	28972612.72	28972613.06	28972613.40	0.0067	0.0001
Earth	74692-04-04 09:51 G	29001846.80	29001846.91	29001847.06	0.0081	0.0070
Moon	74692-04-04 11:46 G	29001846.88	29001846.99	29001847.17	0.0081	0.0067 *
Mercury	74692-05-26 05:03 G	29001898.63	29001898.71	29001898.79	0.0081	0.0068
Mercury	74692-08-22 06:43 G	29001986.65	29001986.78	29001986.90	0.0080	0.0047
Mercury	74692-11-18 08:24 G	29002074.70	29002074.85	29002075.00	0.0080	0.0026
Mercury	74693-02-14 10:05 G	29002162.76	29002162.92	29002163.08	0.0080	0.0005
Mercury	74693-05-13 11:46 G	29002250.83	29002250.99	29002251.14	0.0080	0.0016
Mercury	74693-08-09 13:12 G	29002338.92	29002339.05	29002339.20	0.0080	0.0037
Mercury	74693-11-05 14:53 G	29002427.02	29002427.12	29002427.23	0.0080	0.0058
Mercury	74694-02-01 16:19 G	29002515.17	29002515.18	29002515.21	0.0080	0.0079
Venus	74694-08-10 16:05 G	29002705.04	29002705.17	29002705.33	0.0079	0.0060
Venus	74695-03-24 02:24 G	29002930.39	29002930.60	29002930.83	0.0079	0.0007
Venus	74695-11-04 11:46 G	29003155.94	29003155.99	29003156.11	0.0079	0.0073
Mercury	74848-08-15 14:39 G	29058958.09	29058958.11	29058958.17	0.0064	0.0062
Earth	74848-10-05 02:24 G	29059008.41	29059008.60	29059008.83	0.0064	0.0037
Moon	74848-10-05 04:19 G	29059008.48	29059008.68	29059008.93	0.0064	0.0034 *
Mercury	74848-11-11 15:36 G	29059046.07	29059046.15	29059046.26	0.0064	0.0051
Mercury	74849-02-07 16:34 G	29059134.07	29059134.19	29059134.32	0.0064	0.0040
Mercury	74849-05-06 17:31 G	29059222.09	29059222.23	29059222.37	0.0064	0.0030
Mercury	74849-08-02 18:15 G	29059310.11	29059310.26	29059310.42	0.0064	0.0019
Moon	74849-10-06 13:12 G	29059374.93	29059375.05	29059375.22	0.0064	0.0053
Earth	74849-10-06 13:12 G	29059374.94	29059375.05	29059375.20	0.0064	0.0056 *
Mercury	74849-10-29 19:12 G	29059398.14	29059398.30	29059398.46	0.0064	0.0008
Mercury	74850-01-25 19:55 G	29059486.18	29059486.33	29059486.49	0.0064	0.0003
Mercury	74850-04-23 20:53 G	29059574.21	29059574.37	29059574.52	0.0064	0.0014
Mercury	74850-07-20 21:36 G	29059662.26	29059662.40	29059662.55	0.0064	0.0025
Mercury	74850-10-16 22:19 G	29059750.31	29059750.43	29059750.57	0.0065	0.0036



Mercury	74851-01-12 23:03 G	29059838.36	29059838.46	29059838.58	0.0065	0.0047
Mercury	74851-04-10 23:46 G	29059926.44	29059926.49	29059926.58	0.0065	0.0058
Venus	74852-05-28 03:36 G	29060339.50	29060339.65	29060339.82	0.0065	0.0043
Venus	74853-01-08 08:10 G	29060564.63	29060564.84	29060565.06	0.0065	0.0007
Venus	74853-08-21 12:43 G	29060789.84	29060790.03	29060790.23	0.0066	0.0031
Mercury	74938-01-25 19:12 G	29091627.23	29091627.30	29091627.40	0.0081	0.0068
Earth	74938-04-08 23:31 G	29091700.22	29091700.48	29091700.75	0.0080	0.0008
Moon	74938-04-09 02:24 G	29091700.33	29091700.60	29091700.87	0.0080	0.0005 *
Mercury	74938-04-23 20:53 G	29091715.26	29091715.37	29091715.51	0.0080	0.0047
Mercury	74938-07-20 22:48 G	29091803.31	29091803.45	29091803.60	0.0080	0.0025
Mercury	74938-10-17 00:29 G	29091891.37	29091891.52	29091891.68	0.0080	0.0005
Mercury	74939-01-13 02:10 G	29091979.44	29091979.59	29091979.75	0.0080	0.0017
Mercury	74939-04-11 03:36 G	29092067.52	29092067.65	29092067.80	0.0080	0.0038
Mercury	74939-07-08 05:17 G	29092155.63	29092155.72	29092155.84	0.0080	0.0059
Mercury	74939-10-04 06:58 G	29092243.79	29092243.79	29092243.81	0.0080	0.0079
Venus	74940-09-10 09:36 G	29092585.70	29092585.90	29092586.11	0.0079	0.0029
Venus	74941-04-23 19:27 G	29092811.12	29092811.31	29092811.52	0.0079	0.0037
Mars	74944-04-06 18:15 G	29093889.97	29093890.26	29093890.56	0.0077	0.0013

# 76TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 76th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Mercury	75094-04-17 05:03 G	29148686.70	29148686.71	29148686.74	0.0064	0.0063
Mercury	75094-07-14 05:31 G	29148774.66	29148774.73	29148774.84	0.0064	0.0053
Moon	75094-10-09 05:46 G	29148861.49	29148861.74	29148862.00	0.0064	0.0009
Earth	75094-10-09 08:53 G	29148861.63	29148861.87	29148862.13	0.0064	0.0012 *
Mercury	75094-10-10 06:29 G	29148862.67	29148862.77	29148862.91	0.0064	0.0042
Mercury	75095-01-06 07:27 G	29148950.68	29148950.81	29148950.96	0.0064	0.0031
Mercury	75095-04-04 08:24 G	29149038.70	29149038.85	29149039.01	0.0064	0.0020
Mercury	75095-07-01 09:22 G	29149126.73	29149126.89	29149127.05	0.0064	0.0010
Mercury	75095-09-27 10:05 G	29149214.76	29149214.92	29149215.08	0.0064	0.0002
Mercury	75095-12-24 10:48 G	29149302.80	29149302.95	29149303.11	0.0064	0.0013
Mercury	75096-03-21 11:31 G	29149390.84	29149390.98	29149391.14	0.0064	0.0024
Mercury	75096-06-17 12:15 G	29149478.89	29149479.01	29149479.16	0.0064	0.0035
Mercury	75096-09-13 13:27 G	29149566.95	29149567.06	29149567.17	0.0065	0.0045
Mercury	75096-12-10 14:10 G	29149655.02	29149655.09	29149655.17	0.0065	0.0056
Venus	75098-06-28 15:36 G	29150219.97	29150220.15	29150220.35	0.0065	0.0033
Venus	75099-02-08 20:24 G	29150445.13	29150445.35	29150445.57	0.0065	0.0004
Venus	75099-09-22 00:15 G	29150670.37	29150670.51	29150670.71	0.0066	0.0042
Mercury	75183-09-27 08:24 G	29181355.83	29181355.85	29181355.91	0.0081	0.0078
Mercury	75183-12-24 10:19 G	29181443.83	29181443.93	29181444.05	0.0081	0.0056
Mercury	75184-03-21 12:00 G	29181531.87	29181532.00	29181532.15	0.0080	0.0035
Moon	75184-04-12 03:36 G	29181553.41	29181553.65	29181553.90	0.0080	0.0032
Earth	75184-04-12 06:43 G	29181553.54	29181553.78	29181554.03	0.0080	0.0031 *
Mercury	75184-06-17 13:41 G	29181619.92	29181620.07	29181620.23	0.0080	0.0015
Mercury	75184-09-13 15:36 G	29181707.99	29181708.15	29181708.31	0.0080	0.0007
Mercury	75184-12-10 17:03 G	29181796.07	29181796.21	29181796.37	0.0080	0.0028
Mercury	75185-03-08 18:43 G	29181884.16	29181884.28	29181884.41	0.0080	0.0049
Mercury	75185-06-04 20:10 G	29181972.28	29181972.34	29181972.43	0.0080	0.0070
Venus	75186-02-28 12:29 G	29182241.01	29182241.02	29182241.07	0.0079	0.0079
Venus	75186-10-11 23:17 G	29182466.25	29182466.47	29182466.69	0.0079	0.0011
Venus	75187-05-25 08:53 G	29182691.73	29182691.87	29182692.05	0.0079	0.0055

Mercury	75339-12-17 19:12 G	29238415.29	29238415.30	29238415.35	0.0064	0.0063
Mercury	75340-03-14 20:10 G	29238503.27	29238503.34	29238503.45	0.0064	0.0052
Mercury	75340-06-10 21:07 G	29238591.27	29238591.38	29238591.51	0.0064	0.0041
Mercury	75340-09-06 21:51 G	29238679.28	29238679.41	29238679.56	0.0064	0.0031
Moon	75340-10-12 15:51 G	29238714.94	29238715.16	29238715.41	0.0064	0.0019
Earth	75340-10-12 16:19 G	29238714.95	29238715.18	29238715.45	0.0064	0.0017 *
Mercury	75340-12-03 22:48 G	29238767.31	29238767.45	29238767.61	0.0064	0.0020
Mercury	75341-03-01 23:46 G	29238855.34	29238855.49	29238855.65	0.0064	0.0009
Mercury	75341-05-29 00:43 G	29238943.37	29238943.53	29238943.69	0.0064	0.0002
Mercury	75341-08-25 01:27 G	29239031.41	29239031.56	29239031.72	0.0064	0.0013
Mercury	75341-11-21 02:10 G	29239119.45	29239119.59	29239119.74	0.0064	0.0024
Mercury	75342-02-17 02:53 G	29239207.50	29239207.62	29239207.76	0.0064	0.0035
Mercury	75342-05-16 03:36 G	29239295.55	29239295.65	29239295.78	0.0065	0.0046
Mercury	75342-08-12 04:19 G	29239383.63	29239383.68	29239383.77	0.0065	0.0057
Venus	75343-12-16 23:31 G	29239875.40	29239875.48	29239875.61	0.0065	0.0057
Venus	75344-07-29 04:19 G	29240100.48	29240100.68	29240100.90	0.0065	0.0020
Venus	75345-03-11 08:53 G	29240325.67	29240325.87	29240326.09	0.0066	0.0018
Venus	75345-10-22 13:27 G	29240550.95	29240551.06	29240551.19	0.0066	0.0055
Mars	75349-07-10 06:43 G	29241907.64	29241907.78	29241907.93	0.0067	0.0061
Mercury	75429-05-28 23:03 G	29271084.45	29271084.46	29271084.49	0.0081	0.0080
Mercury	75429-08-25 00:43 G	29271172.43	29271172.53	29271172.64	0.0081	0.0059
Mercury	75429-11-21 02:24 G	29271260.47	29271260.60	29271260.74	0.0080	0.0038
Mercury	75430-02-17 04:05 G	29271348.52	29271348.67	29271348.83	0.0080	0.0017
Mercury	75430-05-16 05:46 G	29271436.59	29271436.74	29271436.90	0.0080	0.0005
Mercury	75430-08-12 07:27 G	29271524.66	29271524.81	29271524.96	0.0080	0.0025
Mercury	75430-11-08 08:53 G	29271612.75	29271612.87	29271613.01	0.0080	0.0046
Mercury	75431-02-04 10:34 G	29271700.86	29271700.94	29271701.03	0.0080	0.0067
Venus	75432-03-31 04:48 G	29272121.54	29272121.70	29272121.88	0.0079	0.0051
Venus	75432-11-11 15:07 G	29272346.91	29272347.13	29272347.35	0.0079	0.0015
Moon	75585-10-15 08:39 G	29328201.73	29328201.86	29328202.03	0.0064	0.0052

Earth	75585-10-15 11:31 G	29328201.86	29328201.98	29328202.17	0.0064	0.0051	*
Mercury	75585-11-14 10:19 G	29328231.86	29328231.93	29328232.03	0.0064	0.0054	
Mercury	75586-02-10 11:17 G	29328319.86	29328319.97	29328320.10	0.0064	0.0043	
Mercury	75586-05-09 12:15 G	29328407.88	29328408.01	29328408.15	0.0064	0.0032	
Mercury	75586-08-05 13:12 G	29328495.90	29328496.05	29328496.20	0.0064	0.0021	
Earth	75586-10-16 22:19 G	29328568.26	29328568.43	29328568.65	0.0064	0.0041	
Moon	75586-10-17 02:24 G	29328568.41	29328568.60	29328568.79	0.0064	0.0042	*
Mercury	75586-11-01 13:55 G	29328583.93	29328584.08	29328584.24	0.0064	0.0011	
Mercury	75587-01-28 14:53 G	29328671.96	29328672.12	29328672.28	0.0064	0.0000	
Mercury	75587-04-26 15:36 G	29328760.00	29328760.15	29328760.31	0.0064	0.0011	
Mercury	75587-07-23 16:19 G	29328848.04	29328848.18	29328848.34	0.0064	0.0022	
Mercury	75587-10-19 17:17 G	29328936.09	29328936.22	29328936.36	0.0064	0.0033	
Mercury	75588-01-15 18:00 G	29329024.14	29329024.25	29329024.37	0.0064	0.0044	
Mercury	75588-04-12 18:43 G	29329112.21	29329112.28	29329112.37	0.0065	0.0055	
Venus	75590-01-16 11:31 G	29329755.86	29329755.98	29329756.16	0.0065	0.0048	
Venus	75590-08-29 16:19 G	29329980.98	29329981.18	29329981.41	0.0065	0.0011	
Venus	75591-04-11 20:39 G	29330206.18	29330206.36	29330206.58	0.0066	0.0028	
Venus	75591-11-23 01:12 G	29330431.55	29330431.55	29330431.59	0.0066	0.0066	
Moon	75675-04-17 17:17 G	29360893.09	29360893.22	29360893.39	0.0081	0.0067	
Earth	75675-04-17 19:27 G	29360893.20	29360893.31	29360893.48	0.0081	0.0069	*
Mercury	75675-04-25 14:10 G	29360901.02	29360901.09	29360901.18	0.0081	0.0069	
Mercury	75675-07-22 15:51 G	29360989.04	29360989.16	29360989.29	0.0081	0.0048	
Mercury	75675-10-18 17:31 G	29361077.09	29361077.23	29361077.38	0.0080	0.0027	
Mercury	75676-01-14 19:12 G	29361165.15	29361165.30	29361165.46	0.0080	0.0006	
Mercury	75676-04-11 20:53 G	29361253.22	29361253.37	29361253.53	0.0080	0.0015	
Mercury	75676-07-08 22:19 G	29361341.30	29361341.43	29361341.58	0.0080	0.0036	
Mercury	75676-10-05 00:00 G	29361429.40	29361429.50	29361429.62	0.0080	0.0057	
Mercury	75677-01-01 01:27 G	29361517.54	29361517.56	29361517.61	0.0080	0.0078	
Venus	75678-04-30 18:29 G	29362002.08	29362002.27	29362002.48	0.0079	0.0034	
Venus	75678-12-12 04:19 G	29362227.49	29362227.68	29362227.90	0.0079	0.0033	

Mars	75681-07-28 08:24 G	29363186.56	29363186.85	29363187.15	0.0077	0.0013
Mercury	75831-07-17 00:43 G	29417960.46	29417960.53	29417960.61	0.0064	0.0055
Mercury	75831-10-13 01:12 G	29418048.46	29418048.55	29418048.68	0.0064	0.0045
Moon	75831-10-19 17:46 G	29418055.02	29418055.24	29418055.47	0.0064	0.0027
Earth	75831-10-19 18:15 G	29418055.05	29418055.26	29418055.51	0.0064	0.0027 *
Mercury	75832-01-09 02:10 G	29418136.47	29418136.59	29418136.74	0.0064	0.0034
Mercury	75832-04-06 03:07 G	29418224.49	29418224.63	29418224.79	0.0064	0.0023
Mercury	75832-07-03 04:05 G	29418312.52	29418312.67	29418312.83	0.0064	0.0012
Mercury	75832-09-29 05:03 G	29418400.55	29418400.71	29418400.87	0.0064	0.0002
Mercury	75832-12-26 05:46 G	29418488.59	29418488.74	29418488.90	0.0064	0.0010
Mercury	75833-03-24 06:29 G	29418576.63	29418576.77	29418576.93	0.0064	0.0021
Mercury	75833-06-20 07:12 G	29418664.68	29418664.80	29418664.95	0.0064	0.0032
Mercury	75833-09-16 07:55 G	29418752.73	29418752.83	29418752.97	0.0064	0.0043
Mercury	75833-12-13 08:39 G	29418840.80	29418840.86	29418840.97	0.0065	0.0054
Mercury	75834-03-11 09:51 G	29418928.91	29418928.91	29418928.93	0.0065	0.0064
Venus	75836-02-17 00:00 G	29419636.34	29419636.50	29419636.70	0.0065	0.0037
Venus	75836-09-29 04:48 G	29419861.49	29419861.70	29419861.93	0.0066	0.0002
Venus	75837-05-12 09:22 G	29420086.71	29420086.89	29420087.07	0.0066	0.0038
Mars	75840-06-05 03:22 G	29421206.37	29421206.64	29421206.97	0.0067	0.0029
Mercury	75920-12-26 03:51 G	29450629.62	29450629.66	29450629.74	0.0081	0.0075
Mercury	75921-03-24 05:31 G	29450717.63	29450717.73	29450717.86	0.0081	0.0054
Moon	75921-04-22 03:51 G	29450746.42	29450746.66	29450746.91	0.0081	0.0018
Earth	75921-04-22 06:00 G	29450746.50	29450746.75	29450747.01	0.0081	0.0020 *
Mercury	75921-06-20 07:12 G	29450805.67	29450805.80	29450805.96	0.0080	0.0033
Mercury	75921-09-16 09:07 G	29450893.73	29450893.88	29450894.04	0.0080	0.0011
Mercury	75921-12-13 10:48 G	29450981.80	29450981.95	29450982.11	0.0080	0.0010
Mercury	75922-03-11 12:15 G	29451069.88	29451070.01	29451070.16	0.0080	0.0031
Mercury	75922-06-07 14:10 G	29451157.97	29451158.09	29451158.21	0.0080	0.0051
Mercury	75922-09-03 15:36 G	29451246.09	29451246.15	29451246.22	0.0080	0.0072
Venus	75923-10-19 23:31 G	29451657.45	29451657.48	29451657.53	0.0079	0.0077

Venus	75924-06-01 09:51 G	29451882.69	29451882.91	29451883.13	0.0079	0.0010
Venus	75925-01-12 19:41 G	29452108.18	29452108.32	29452108.49	0.0079	0.0056

# 77TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 77th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	76077-03-16 13:56 G		29507689.05	29507689.08	29507689.15	0.0064	0.0061	
Mercury	76077-06-12 14:53 G		29507777.04	29507777.12	29507777.23	0.0064	0.0050	
Mercury	76077-09-08 15:51 G		29507865.04	29507865.16	29507865.30	0.0064	0.0039	
Earth	76077-10-21 22:20 G		29507908.19	29507908.43	29507908.70	0.0064	0.0010	
Moon	76077-10-22 02:10 G		29507908.34	29507908.59	29507908.85	0.0064	0.0009	*
Mercury	76077-12-05 16:34 G		29507953.06	29507953.19	29507953.35	0.0064	0.0029	
Mercury	76078-03-03 17:32 G		29508041.09	29508041.23	29508041.39	0.0064	0.0018	
Mercury	76078-05-30 18:29 G		29508129.12	29508129.27	29508129.43	0.0064	0.0007	
Mercury	76078-08-26 19:27 G		29508217.15	29508217.31	29508217.47	0.0064	0.0004	
Mercury	76078-11-22 20:10 G		29508305.19	29508305.34	29508305.50	0.0064	0.0015	
Mercury	76079-02-18 21:08 G		29508393.23	29508393.38	29508393.53	0.0064	0.0026	
Mercury	76079-05-17 21:51 G		29508481.28	29508481.41	29508481.54	0.0064	0.0037	
Mercury	76079-08-13 22:34 G		29508569.34	29508569.44	29508569.56	0.0064	0.0048	
Mercury	76079-11-09 23:17 G		29508657.42	29508657.47	29508657.55	0.0064	0.0059	
Venus	76082-03-18 10:34 G		29509516.76	29509516.94	29509517.14	0.0065	0.0031	
Venus	76082-10-29 15:08 G		29509741.92	29509742.13	29509742.36	0.0066	0.0006	

Venus	76083-06-11 19:27 G	29509967.16	29509967.31	29509967.49	0.0066	0.0044
Mercury	76166-11-22 18:29 G	29540446.20	29540446.27	29540446.35	0.0081	0.0070
Mercury	76167-02-18 20:10 G	29540534.22	29540534.34	29540534.47	0.0081	0.0049
Earth	76167-04-25 10:05 G	29540599.66	29540599.92	29540600.19	0.0081	0.0004
Moon	76167-04-25 13:12 G	29540599.80	29540600.05	29540600.31	0.0081	0.0008 *
Mercury	76167-05-17 21:51 G	29540622.27	29540622.41	29540622.56	0.0080	0.0028
Mercury	76167-08-13 23:32 G	29540710.33	29540710.48	29540710.64	0.0080	0.0007
Mercury	76167-11-10 01:12 G	29540798.40	29540798.55	29540798.70	0.0080	0.0014
Mercury	76168-02-06 02:39 G	29540886.48	29540886.61	29540886.76	0.0080	0.0035
Mercury	76168-05-04 04:05 G	29540974.58	29540974.67	29540974.80	0.0080	0.0056
Mercury	76168-07-31 05:46 G	29541062.71	29541062.74	29541062.80	0.0080	0.0077
Venus	76169-11-18 11:03 G	29541537.86	29541537.96	29541538.08	0.0079	0.0068
Venus	76170-07-01 21:22 G	29541763.17	29541763.39	29541763.62	0.0079	0.0002
Venus	76171-02-12 07:12 G	29541988.70	29541988.80	29541988.94	0.0078	0.0066
Mercury	76323-02-13 04:20 G	29597505.62	29597505.68	29597505.77	0.0064	0.0057
Mercury	76323-05-12 05:17 G	29597593.62	29597593.72	29597593.84	0.0064	0.0046
Mercury	76323-08-08 06:15 G	29597681.63	29597681.76	29597681.90	0.0064	0.0035
Moon	76323-10-27 01:12 G	29597761.28	29597761.55	29597761.81	0.0064	0.0005
Earth	76323-10-27 01:41 G	29597761.32	29597761.57	29597761.83	0.0064	0.0003 *
Mercury	76323-11-04 06:58 G	29597769.65	29597769.79	29597769.95	0.0064	0.0025
Mercury	76324-01-31 07:56 G	29597857.68	29597857.83	29597857.99	0.0064	0.0014
Mercury	76324-04-28 08:53 G	29597945.71	29597945.87	29597946.03	0.0064	0.0003
Mercury	76324-07-25 09:36 G	29598033.74	29598033.90	29598034.06	0.0064	0.0008
Mercury	76324-10-21 10:20 G	29598121.78	29598121.93	29598122.09	0.0064	0.0019
Mercury	76325-01-17 11:17 G	29598209.83	29598209.97	29598210.11	0.0064	0.0030
Mercury	76325-04-15 12:00 G	29598297.88	29598298.00	29598298.13	0.0064	0.0041
Mercury	76325-07-12 12:44 G	29598385.95	29598386.03	29598386.14	0.0064	0.0052
Mercury	76325-10-08 13:27 G	29598474.04	29598474.06	29598474.11	0.0064	0.0063
Venus	76327-09-06 16:05 G	29599172.17	29599172.17	29599172.17	0.0065	0.0065
Venus	76328-04-18 20:10 G	29599397.16	29599397.34	29599397.55	0.0065	0.0029

Venus	76328-11-30 00:44 G	29599622.32	29599622.53	29599622.76	0.0066	0.0010
Venus	76329-07-13 05:03 G	29599847.58	29599847.71	29599847.89	0.0066	0.0048
Mercury	76412-10-20 08:53 G	29630262.79	29630262.87	29630262.97	0.0081	0.0065
Mercury	76413-01-16 10:34 G	29630350.82	29630350.94	29630351.08	0.0081	0.0044
Mercury	76413-04-14 12:15 G	29630438.87	29630439.01	29630439.17	0.0081	0.0023
Earth	76413-04-28 14:39 G	29630452.87	29630453.11	29630453.36	0.0080	0.0029
Moon	76413-04-28 15:08 G	29630452.90	29630453.13	29630453.39	0.0080	0.0033 *
Mercury	76413-07-11 14:10 G	29630526.93	29630527.09	29630527.24	0.0080	0.0002
Mercury	76413-10-07 15:36 G	29630615.00	29630615.15	29630615.30	0.0080	0.0019
Mercury	76414-01-03 17:03 G	29630703.09	29630703.21	29630703.36	0.0080	0.0040
Mercury	76414-04-01 18:29 G	29630791.19	29630791.27	29630791.39	0.0080	0.0061
Venus	76415-12-19 22:48 G	29631418.30	29631418.45	29631418.61	0.0079	0.0057
Venus	76416-08-01 08:53 G	29631643.66	29631643.87	29631644.10	0.0079	0.0011
Venus	76417-03-14 18:58 G	29631869.25	29631869.29	29631869.35	0.0078	0.0076
Mars	76418-11-18 06:00 G	29632482.45	29632482.75	29632483.06	0.0077	0.0001
Mercury	76569-01-09 17:46 G	29687322.19	29687322.24	29687322.33	0.0063	0.0057
Mercury	76569-04-07 18:44 G	29687410.19	29687410.28	29687410.41	0.0064	0.0046
Mercury	76569-07-04 19:56 G	29687498.20	29687498.33	29687498.47	0.0064	0.0035
Mercury	76569-09-30 20:24 G	29687586.22	29687586.35	29687586.52	0.0064	0.0025
Moon	76569-10-28 23:03 G	29687614.22	29687614.46	29687614.72	0.0064	0.0012
Earth	76569-10-29 02:24 G	29687614.35	29687614.60	29687614.86	0.0064	0.0009 *
Mercury	76569-12-27 21:36 G	29687674.25	29687674.40	29687674.56	0.0064	0.0014
Mercury	76570-03-25 22:34 G	29687762.28	29687762.44	29687762.60	0.0064	0.0003
Mercury	76570-06-21 23:17 G	29687850.31	29687850.47	29687850.63	0.0064	0.0008
Mercury	76570-09-18 00:00 G	29687938.36	29687938.50	29687938.66	0.0064	0.0019
Mercury	76570-12-15 00:44 G	29688026.40	29688026.53	29688026.69	0.0064	0.0030
Mercury	76571-03-13 01:56 G	29688114.46	29688114.58	29688114.70	0.0064	0.0041
Mercury	76571-06-09 02:39 G	29688202.52	29688202.61	29688202.71	0.0064	0.0052
Mercury	76571-09-05 03:22 G	29688290.62	29688290.64	29688290.68	0.0064	0.0063
Venus	76574-05-19 04:20 G	29689277.50	29689277.68	29689277.89	0.0065	0.0030



Venus	76574-12-30 09:08 G	29689502.66	29689502.88	29689503.10	0.0066	0.0008
Venus	76575-08-12 13:27 G	29689727.92	29689728.06	29689728.23	0.0066	0.0046
Mars	76577-09-22 12:44 G	29690499.89	29690500.03	29690500.18	0.0067	0.0060
Mercury	76658-09-17 21:51 G	29720079.36	29720079.41	29720079.50	0.0081	0.0072
Mercury	76658-12-14 23:32 G	29720167.38	29720167.48	29720167.62	0.0081	0.0051
Mercury	76659-03-13 01:27 G	29720255.42	29720255.56	29720255.71	0.0081	0.0029
Moon	76659-05-02 08:39 G	29720305.64	29720305.86	29720306.12	0.0080	0.0032
Earth	76659-05-02 12:15 G	29720305.78	29720306.01	29720306.27	0.0080	0.0028 *
Mercury	76659-06-09 03:08 G	29720343.48	29720343.63	29720343.79	0.0080	0.0008
Mercury	76659-09-05 04:48 G	29720431.54	29720431.70	29720431.85	0.0080	0.0013
Mercury	76659-12-02 06:15 G	29720519.63	29720519.76	29720519.91	0.0080	0.0033
Mercury	76660-02-28 07:41 G	29720607.72	29720607.82	29720607.95	0.0080	0.0054
Mercury	76660-05-26 09:22 G	29720695.85	29720695.89	29720695.95	0.0080	0.0075
Venus	76662-01-19 06:29 G	29721298.65	29721298.77	29721298.93	0.0079	0.0061
Venus	76662-09-01 17:03 G	29721523.99	29721524.21	29721524.44	0.0079	0.0006
Venus	76663-04-15 02:53 G	29721749.54	29721749.62	29721749.72	0.0078	0.0072
Mercury	76814-12-08 06:58 G	29777138.75	29777138.79	29777138.86	0.0063	0.0060
Mercury	76815-03-06 07:56 G	29777226.74	29777226.83	29777226.95	0.0064	0.0049
Mercury	76815-06-02 08:53 G	29777314.75	29777314.87	29777315.01	0.0064	0.0038
Mercury	76815-08-29 09:51 G	29777402.77	29777402.91	29777403.06	0.0064	0.0027
Earth	76815-11-02 00:58 G	29777467.28	29777467.54	29777467.79	0.0064	0.0008
Moon	76815-11-02 02:39 G	29777467.38	29777467.61	29777467.87	0.0064	0.0012 *
Mercury	76815-11-25 10:34 G	29777490.79	29777490.94	29777491.11	0.0064	0.0017
Mercury	76816-02-21 11:32 G	29777578.82	29777578.98	29777579.15	0.0064	0.0006
Mercury	76816-05-19 12:29 G	29777666.86	29777667.02	29777667.18	0.0064	0.0005
Mercury	76816-08-15 13:12 G	29777754.90	29777755.05	29777755.21	0.0064	0.0016
Mercury	76816-11-11 13:56 G	29777842.95	29777843.08	29777843.24	0.0064	0.0027
Mercury	76817-02-07 14:39 G	29777931.00	29777931.11	29777931.26	0.0064	0.0038
Mercury	76817-05-06 15:51 G	29778019.06	29778019.16	29778019.26	0.0064	0.0049
Mercury	76817-08-02 16:34 G	29778107.14	29778107.19	29778107.25	0.0064	0.0060

Venus	76820-06-18 11:32 G	29779157.81	29779157.98	29779158.18	0.0065	0.0035
Venus	76821-01-29 16:20 G	29779382.96	29779383.18	29779383.40	0.0066	0.0002
Venus	76821-09-11 20:24 G	29779608.20	29779608.35	29779608.55	0.0066	0.0041
Mars	76824-02-15 09:51 G	29780494.60	29780494.91	29780495.23	0.0067	0.0021
Mercury	76904-08-15 10:48 G	29809895.95	29809895.95	29809896.00	0.0081	0.0080
Mercury	76904-11-11 12:29 G	29809983.93	29809984.02	29809984.14	0.0081	0.0059
Mercury	76905-02-07 14:24 G	29810071.97	29810072.10	29810072.24	0.0081	0.0037
Earth	76905-05-05 09:22 G	29810158.65	29810158.89	29810159.15	0.0081	0.0024
Moon	76905-05-05 10:34 G	29810158.72	29810158.94	29810159.20	0.0081	0.0027 *
Mercury	76905-05-06 16:05 G	29810160.02	29810160.17	29810160.33	0.0081	0.0016
Mercury	76905-08-02 17:46 G	29810248.09	29810248.24	29810248.40	0.0080	0.0005
Mercury	76905-10-29 19:12 G	29810336.16	29810336.30	29810336.46	0.0080	0.0026
Mercury	76906-01-25 20:53 G	29810424.25	29810424.37	29810424.50	0.0080	0.0046
Mercury	76906-04-23 22:20 G	29810512.36	29810512.43	29810512.53	0.0080	0.0067
Venus	76908-02-19 14:24 G	29811179.00	29811179.10	29811179.24	0.0079	0.0066
Venus	76908-10-02 00:58 G	29811404.32	29811404.54	29811404.76	0.0079	0.0001
Venus	76909-05-15 10:34 G	29811629.84	29811629.94	29811630.07	0.0078	0.0067

# 78TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 78th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	77061-01-31 20:53 G	29867043.29	29867043.37	29867043.46	0.0063	0.0054		

Mercury	77061-04-29 21:22 G	29867131.29	29867131.39	29867131.53	0.0063	0.0044
Mercury	77061-07-26 22:34 G	29867219.31	29867219.44	29867219.58	0.0064	0.0033
Mercury	77061-10-22 23:32 G	29867307.33	29867307.48	29867307.63	0.0064	0.0022
Earth	77061-11-04 21:51 G	29867320.16	29867320.41	29867320.67	0.0064	0.0002
Moon	77061-11-05 00:15 G	29867320.25	29867320.51	29867320.78	0.0064	0.0006 *
Mercury	77062-01-19 00:29 G	29867395.36	29867395.52	29867395.68	0.0064	0.0011
Mercury	77062-04-17 01:12 G	29867483.39	29867483.55	29867483.71	0.0064	0.0001
Mercury	77062-07-14 01:56 G	29867571.43	29867571.58	29867571.75	0.0064	0.0011
Mercury	77062-10-10 02:53 G	29867659.47	29867659.62	29867659.78	0.0064	0.0021
Mercury	77063-01-06 03:36 G	29867747.52	29867747.65	29867747.80	0.0064	0.0032
Mercury	77063-04-04 04:20 G	29867835.58	29867835.68	29867835.81	0.0064	0.0043
Mercury	77063-07-01 05:03 G	29867923.65	29867923.71	29867923.82	0.0064	0.0055
Venus	77066-07-19 17:17 G	29869038.08	29869038.22	29869038.40	0.0065	0.0045
Venus	77067-03-01 22:05 G	29869263.21	29869263.42	29869263.64	0.0066	0.0007
Venus	77067-10-13 02:39 G	29869488.42	29869488.61	29869488.81	0.0066	0.0031
Mercury	77150-10-10 00:29 G	29899800.49	29899800.52	29899800.58	0.0081	0.0077
Mercury	77151-01-06 02:10 G	29899888.49	29899888.59	29899888.71	0.0081	0.0056
Mercury	77151-04-04 03:51 G	29899976.53	29899976.66	29899976.80	0.0081	0.0035
Earth	77151-05-09 00:44 G	29900011.27	29900011.53	29900011.79	0.0081	0.0003
Moon	77151-05-09 03:22 G	29900011.37	29900011.64	29900011.91	0.0081	0.0002 *
Mercury	77151-07-01 05:32 G	29900064.58	29900064.73	29900064.88	0.0081	0.0014
Mercury	77151-09-27 07:12 G	29900152.64	29900152.80	29900152.95	0.0080	0.0007
Mercury	77151-12-24 08:39 G	29900240.72	29900240.86	29900241.01	0.0080	0.0028
Mercury	77152-03-21 10:20 G	29900328.81	29900328.93	29900329.06	0.0080	0.0048
Mercury	77152-06-17 11:46 G	29900416.92	29900416.99	29900417.08	0.0080	0.0069
Venus	77154-11-02 04:34 G	29901284.49	29901284.69	29901284.92	0.0079	0.0018
Venus	77155-06-15 14:53 G	29901509.95	29901510.12	29901510.29	0.0078	0.0049
Mercury	77306-12-30 09:08 G	29956859.87	29956859.88	29956859.92	0.0063	0.0063
Mercury	77307-03-28 10:05 G	29956947.84	29956947.92	29956948.02	0.0063	0.0052
Mercury	77307-06-24 10:48 G	29957035.84	29957035.95	29957036.08	0.0063	0.0041

Mercury	77307-09-20 11:46 G	29957123.86	29957123.99	29957124.14	0.0064	0.0031
Moon	77307-11-08 13:27 G	29957172.81	29957173.06	29957173.33	0.0064	0.0009
Earth	77307-11-08 17:03 G	29957172.96	29957173.21	29957173.46	0.0064	0.0011 *
Mercury	77307-12-17 12:44 G	29957211.88	29957212.03	29957212.19	0.0064	0.0020
Mercury	77308-03-14 13:41 G	29957299.91	29957300.07	29957300.23	0.0064	0.0009
Mercury	77308-06-10 14:24 G	29957387.94	29957388.10	29957388.27	0.0064	0.0002
Mercury	77308-09-06 15:08 G	29957475.98	29957476.13	29957476.30	0.0064	0.0013
Mercury	77308-12-03 16:05 G	29957564.02	29957564.17	29957564.32	0.0064	0.0023
Mercury	77309-03-01 16:48 G	29957652.07	29957652.20	29957652.34	0.0064	0.0034
Mercury	77309-05-28 17:32 G	29957740.13	29957740.23	29957740.36	0.0064	0.0045
Mercury	77309-08-24 18:15 G	29957828.20	29957828.26	29957828.36	0.0064	0.0056
Venus	77312-08-18 21:22 G	29958918.32	29958918.39	29958918.52	0.0065	0.0059
Venus	77313-04-01 02:24 G	29959143.40	29959143.60	29959143.81	0.0066	0.0021
Venus	77313-11-12 06:44 G	29959368.58	29959368.78	29959369.00	0.0066	0.0018
Venus	77314-06-25 11:03 G	29959593.87	29959593.96	29959594.10	0.0066	0.0056
Mercury	77396-12-02 13:41 G	29989705.04	29989705.07	29989705.14	0.0081	0.0076
Mercury	77397-02-28 15:36 G	29989793.04	29989793.15	29989793.27	0.0081	0.0055
Moon	77397-05-10 11:32 G	29989863.76	29989863.98	29989864.24	0.0081	0.0036
Earth	77397-05-10 14:53 G	29989863.90	29989864.12	29989864.38	0.0081	0.0034 *
Mercury	77397-05-27 17:17 G	29989881.08	29989881.22	29989881.36	0.0081	0.0034
Mercury	77397-08-23 18:58 G	29989969.14	29989969.29	29989969.44	0.0081	0.0013
Mercury	77397-11-19 20:24 G	29990057.20	29990057.35	29990057.51	0.0080	0.0008
Mercury	77398-02-15 22:05 G	29990145.28	29990145.42	29990145.57	0.0080	0.0029
Mercury	77398-05-14 23:32 G	29990233.37	29990233.48	29990233.61	0.0080	0.0050
Mercury	77398-08-11 00:58 G	29990321.48	29990321.54	29990321.63	0.0080	0.0070
Venus	77400-12-02 07:56 G	29991164.66	29991164.83	29991165.05	0.0079	0.0038
Venus	77401-07-15 18:00 G	29991390.06	29991390.25	29991390.47	0.0078	0.0030
Mercury	77553-05-21 22:48 G	30046852.36	30046852.45	30046852.54	0.0063	0.0053
Mercury	77553-08-17 23:17 G	30046940.37	30046940.47	30046940.61	0.0063	0.0043
Moon	77553-11-11 09:22 G	30047025.68	30047025.89	30047026.12	0.0063	0.0028

Earth	77553-11-11 10:05 G	30047025.69	30047025.92	30047026.15	0.0063	0.0029	*
Mercury	77553-11-14 00:15 G	30047028.38	30047028.51	30047028.66	0.0063	0.0032	
Mercury	77554-02-10 01:12 G	30047116.41	30047116.55	30047116.71	0.0064	0.0021	
Mercury	77554-05-09 02:10 G	30047204.43	30047204.59	30047204.76	0.0064	0.0010	
Mercury	77554-08-05 03:08 G	30047292.47	30047292.63	30047292.79	0.0064	0.0001	
Mercury	77554-11-01 03:51 G	30047380.51	30047380.66	30047380.83	0.0064	0.0012	
Moon	77554-11-12 17:46 G	30047392.20	30047392.24	30047392.35	0.0064	0.0061	
Earth	77554-11-12 19:41 G	30047392.28	30047392.32	30047392.43	0.0064	0.0061	*
Mercury	77555-01-28 04:48 G	30047468.55	30047468.70	30047468.85	0.0064	0.0022	
Mercury	77555-04-26 05:32 G	30047556.60	30047556.73	30047556.88	0.0064	0.0033	
Mercury	77555-07-23 06:15 G	30047644.66	30047644.76	30047644.89	0.0064	0.0045	
Mercury	77555-10-19 07:12 G	30047732.73	30047732.80	30047732.89	0.0064	0.0055	
Venus	77559-05-02 05:03 G	30049023.56	30049023.71	30049023.92	0.0065	0.0039	
Venus	77559-12-13 10:05 G	30049248.70	30049248.92	30049249.14	0.0066	0.0000	
Venus	77560-07-25 14:24 G	30049473.93	30049474.10	30049474.29	0.0066	0.0038	
Mercury	77643-04-25 03:36 G	30079697.57	30079697.65	30079697.76	0.0081	0.0064	
Mercury	77643-07-22 05:17 G	30079785.60	30079785.72	30079785.86	0.0081	0.0043	
Mercury	77643-10-18 06:58 G	30079873.65	30079873.79	30079873.95	0.0081	0.0022	
Mercury	77644-01-14 08:39 G	30079961.71	30079961.86	30079962.02	0.0081	0.0002	
Mercury	77644-04-11 10:05 G	30080049.78	30080049.92	30080050.08	0.0080	0.0021	
Mercury	77644-07-08 12:00 G	30080137.87	30080138.00	30080138.13	0.0080	0.0041	
Mercury	77644-10-04 13:27 G	30080225.97	30080226.06	30080226.16	0.0080	0.0061	
Venus	77647-01-01 08:39 G	30081044.78	30081044.86	30081044.98	0.0079	0.0070	
Venus	77647-08-14 18:58 G	30081270.07	30081270.29	30081270.52	0.0079	0.0004	
Venus	77648-03-27 04:34 G	30081495.58	30081495.69	30081495.84	0.0078	0.0064	
Mars	77648-12-23 03:08 G	30081766.50	30081766.63	30081766.79	0.0078	0.0068	
Mercury	77799-07-15 10:34 G	30136756.89	30136756.94	30136757.01	0.0063	0.0059	
Mercury	77799-10-11 11:17 G	30136844.88	30136844.97	30136845.09	0.0063	0.0048	
Earth	77799-11-13 23:03 G	30136878.39	30136878.46	30136878.61	0.0063	0.0058	
Moon	77799-11-14 02:53 G	30136878.54	30136878.62	30136878.76	0.0063	0.0058	*

Mercury	77800-01-07 12:15 G	30136932.89	30136933.01	30136933.15	0.0063	0.0038
Mercury	77800-04-05 13:12 G	30137020.91	30137021.05	30137021.20	0.0063	0.0027
Mercury	77800-07-02 14:10 G	30137108.94	30137109.09	30137109.25	0.0064	0.0016
Mercury	77800-09-28 14:53 G	30137196.97	30137197.12	30137197.29	0.0064	0.0006
Moon	77800-11-15 07:41 G	30137244.63	30137244.82	30137245.05	0.0064	0.0034
Earth	77800-11-15 10:05 G	30137244.72	30137244.92	30137245.16	0.0064	0.0032 *
Mercury	77800-12-25 15:51 G	30137285.00	30137285.16	30137285.33	0.0064	0.0006
Mercury	77801-03-23 16:34 G	30137373.04	30137373.19	30137373.36	0.0064	0.0017
Mercury	77801-06-19 17:32 G	30137461.09	30137461.23	30137461.38	0.0064	0.0027
Mercury	77801-09-15 18:15 G	30137549.14	30137549.26	30137549.40	0.0064	0.0038
Mercury	77801-12-12 19:12 G	30137637.21	30137637.30	30137637.41	0.0064	0.0049
Mercury	77802-03-10 19:56 G	30137725.29	30137725.33	30137725.40	0.0064	0.0060
Venus	77805-06-01 06:15 G	30138903.73	30138903.76	30138903.86	0.0065	0.0063
Venus	77806-01-12 11:03 G	30139128.77	30139128.96	30139129.18	0.0066	0.0025
Venus	77806-08-25 15:51 G	30139353.95	30139354.16	30139354.38	0.0066	0.0014
Venus	77807-04-07 20:24 G	30139579.23	30139579.35	30139579.49	0.0066	0.0052
Mercury	77889-06-18 15:36 G	30169602.11	30169602.15	30169602.19	0.0081	0.0078
Mercury	77889-09-14 16:48 G	30169690.11	30169690.20	30169690.32	0.0081	0.0057
Mercury	77889-12-11 18:29 G	30169778.15	30169778.27	30169778.42	0.0081	0.0036
Mercury	77890-03-09 20:24 G	30169866.20	30169866.35	30169866.50	0.0081	0.0015
Moon	77890-05-18 09:51 G	30169935.73	30169935.91	30169936.15	0.0081	0.0047
Earth	77890-05-18 12:44 G	30169935.83	30169936.03	30169936.28	0.0081	0.0043 *
Mercury	77890-06-05 21:51 G	30169954.26	30169954.41	30169954.57	0.0081	0.0007
Mercury	77890-09-01 23:17 G	30170042.34	30170042.47	30170042.63	0.0080	0.0028
Mercury	77890-11-29 01:12 G	30170130.42	30170130.55	30170130.67	0.0080	0.0048
Mercury	77891-02-25 02:39 G	30170218.54	30170218.61	30170218.69	0.0080	0.0068
Venus	77893-09-13 17:46 G	30171150.07	30171150.24	30171150.44	0.0079	0.0041
Venus	77894-04-27 03:51 G	30171375.46	30171375.66	30171375.88	0.0078	0.0026
Mars	77895-05-17 17:32 G	30171760.98	30171761.23	30171761.52	0.0078	0.0035

# 79TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 79th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	78045-12-04 22:34	G	30226749.39	30226749.44	30226749.53	0.0063	0.0057	
Mercury	78046-03-02 23:46	G	30226837.39	30226837.49	30226837.60	0.0063	0.0046	
Mercury	78046-05-30 00:44	G	30226925.40	30226925.53	30226925.66	0.0063	0.0036	
Mercury	78046-08-26 01:27	G	30227013.42	30227013.56	30227013.72	0.0063	0.0025	
Earth	78046-11-17 22:05	G	30227097.17	30227097.42	30227097.68	0.0063	0.0004	
Moon	78046-11-18 01:27	G	30227097.31	30227097.56	30227097.82	0.0063	0.0001	*
Mercury	78046-11-22 02:24	G	30227101.44	30227101.60	30227101.76	0.0063	0.0015	
Mercury	78047-02-18 03:22	G	30227189.48	30227189.64	30227189.80	0.0064	0.0004	
Mercury	78047-05-17 04:05	G	30227277.51	30227277.67	30227277.84	0.0064	0.0007	
Mercury	78047-08-13 04:48	G	30227365.56	30227365.70	30227365.87	0.0064	0.0018	
Mercury	78047-11-09 05:32	G	30227453.60	30227453.73	30227453.89	0.0064	0.0029	
Mercury	78048-02-05 06:29	G	30227541.66	30227541.77	30227541.91	0.0064	0.0040	
Mercury	78048-05-03 07:27	G	30227629.72	30227629.81	30227629.92	0.0064	0.0050	
Mercury	78048-07-30 08:10	G	30227717.81	30227717.84	30227717.90	0.0064	0.0062	
Jupiter	78051-02-25 17:17	G	30228657.74	30228658.22	30228658.78	0.0065	0.0015	
Venus	78052-02-11 10:20	G	30229008.83	30229008.93	30229009.08	0.0065	0.0054	
Venus	78052-09-23 15:08	G	30229233.93	30229234.13	30229234.36	0.0066	0.0016	
Venus	78053-05-06 19:41	G	30229459.13	30229459.32	30229459.54	0.0066	0.0023	
Venus	78053-12-17 23:46	G	30229684.45	30229684.49	30229684.60	0.0066	0.0063	

Mercury	78136-02-05 04:48 G	30259682.62	30259682.70	30259682.81	0.0081	0.0061
Mercury	78136-05-03 06:29 G	30259770.65	30259770.77	30259770.91	0.0081	0.0040
Earth	78136-05-20 12:29 G	30259787.82	30259788.02	30259788.25	0.0081	0.0045
Moon	78136-05-20 15:36 G	30259787.95	30259788.15	30259788.39	0.0081	0.0042 *
Mercury	78136-07-30 08:24 G	30259858.70	30259858.85	30259859.00	0.0081	0.0019
Mercury	78136-10-26 09:51 G	30259946.76	30259946.91	30259947.07	0.0081	0.0002
Mercury	78137-01-22 11:32 G	30260034.83	30260034.98	30260035.13	0.0080	0.0023
Mercury	78137-04-20 12:58 G	30260122.92	30260123.04	30260123.17	0.0080	0.0043
Mercury	78137-07-17 14:24 G	30260211.02	30260211.10	30260211.20	0.0080	0.0064
Venus	78140-05-26 23:17 G	30261255.26	30261255.47	30261255.68	0.0079	0.0026
Venus	78141-01-07 08:53 G	30261480.70	30261480.87	30261481.08	0.0078	0.0041
Mars	78141-10-08 22:48 G	30261755.21	30261755.45	30261755.74	0.0078	0.0038
Mercury	78292-04-26 09:51 G	30316741.90	30316741.91	30316741.95	0.0063	0.0062
Mercury	78292-07-23 11:03 G	30316829.87	30316829.96	30316830.06	0.0063	0.0052
Mercury	78292-10-19 11:32 G	30316917.88	30316917.98	30316918.13	0.0063	0.0042
Moon	78292-11-20 05:03 G	30316949.58	30316949.71	30316949.92	0.0063	0.0049
Earth	78292-11-20 05:32 G	30316949.60	30316949.73	30316949.89	0.0063	0.0052 *
Mercury	78293-01-15 12:44 G	30317005.89	30317006.03	30317006.18	0.0063	0.0030
Mercury	78293-04-13 13:41 G	30317093.92	30317094.07	30317094.23	0.0063	0.0020
Mercury	78293-07-10 14:24 G	30317181.95	30317182.10	30317182.27	0.0063	0.0010
Mercury	78293-10-06 15:22 G	30317269.98	30317270.14	30317270.31	0.0064	0.0003
Earth	78293-11-21 15:36 G	30317315.96	30317316.15	30317316.38	0.0064	0.0037
Moon	78293-11-21 17:46 G	30317316.05	30317316.24	30317316.47	0.0064	0.0034 *
Mercury	78294-01-02 16:05 G	30317358.02	30317358.17	30317358.34	0.0064	0.0013
Mercury	78294-03-31 16:48 G	30317446.07	30317446.20	30317446.37	0.0064	0.0024
Mercury	78294-06-27 18:00 G	30317534.12	30317534.25	30317534.39	0.0064	0.0034
Mercury	78294-09-23 18:44 G	30317622.17	30317622.28	30317622.40	0.0064	0.0045
Mercury	78294-12-20 19:27 G	30317710.25	30317710.31	30317710.40	0.0064	0.0056
Venus	78298-10-24 11:32 G	30319113.88	30319113.98	30319114.13	0.0065	0.0054
Venus	78299-06-06 16:20 G	30319338.98	30319339.18	30319339.40	0.0066	0.0016



Venus	78300-01-17 20:53 G	30319564.17	30319564.37	30319564.58	0.0066	0.0023
Venus	78300-08-31 01:12 G	30319789.50	30319789.55	30319789.65	0.0066	0.0062
Mercury	78382-06-27 16:05 G	30349675.12	30349675.17	30349675.24	0.0081	0.0074
Mercury	78382-09-23 17:46 G	30349763.13	30349763.24	30349763.36	0.0081	0.0053
Mercury	78382-12-20 19:27 G	30349851.17	30349851.31	30349851.45	0.0081	0.0032
Mercury	78383-03-18 20:53 G	30349939.22	30349939.37	30349939.53	0.0081	0.0012
Earth	78383-05-25 13:56 G	30350006.86	30350007.08	30350007.33	0.0081	0.0037
Moon	78383-05-25 15:22 G	30350006.93	30350007.14	30350007.38	0.0081	0.0036 *
Mercury	78383-06-14 22:34 G	30350027.29	30350027.44	30350027.59	0.0081	0.0009
Mercury	78383-09-11 00:00 G	30350115.36	30350115.50	30350115.65	0.0080	0.0030
Mercury	78383-12-08 01:41 G	30350203.45	30350203.57	30350203.69	0.0080	0.0051
Mercury	78384-03-05 02:53 G	30350291.57	30350291.62	30350291.70	0.0080	0.0072
Venus	78387-02-07 01:12 G	30351360.35	30351360.55	30351360.78	0.0079	0.0023
Venus	78387-09-20 11:03 G	30351585.79	30351585.96	30351586.16	0.0078	0.0044
Mars	78388-03-01 19:12 G	30351749.19	30351749.30	30351749.49	0.0078	0.0068
Mercury	78538-12-13 21:22 G	30406822.36	30406822.39	30406822.46	0.0063	0.0060
Mercury	78539-03-11 22:34 G	30406910.35	30406910.44	30406910.55	0.0063	0.0049
Mercury	78539-06-07 23:32 G	30406998.36	30406998.48	30406998.62	0.0063	0.0039
Mercury	78539-09-04 00:15 G	30407086.38	30407086.51	30407086.67	0.0063	0.0028
Earth	78539-11-24 21:22 G	30407168.16	30407168.39	30407168.65	0.0063	0.0018
Moon	78539-11-24 23:03 G	30407168.23	30407168.46	30407168.73	0.0063	0.0021 *
Mercury	78539-12-01 01:12 G	30407174.40	30407174.55	30407174.72	0.0063	0.0018
Mercury	78540-02-27 02:10 G	30407262.43	30407262.59	30407262.76	0.0063	0.0007
Mercury	78540-05-25 03:08 G	30407350.47	30407350.63	30407350.79	0.0063	0.0004
Mercury	78540-08-21 04:05 G	30407438.51	30407438.67	30407438.83	0.0064	0.0015
Mercury	78540-11-17 04:48 G	30407526.56	30407526.70	30407526.85	0.0064	0.0026
Mercury	78541-02-13 05:32 G	30407614.61	30407614.73	30407614.87	0.0064	0.0037
Mercury	78541-05-12 06:15 G	30407702.67	30407702.76	30407702.89	0.0064	0.0048
Mercury	78541-08-08 07:27 G	30407790.75	30407790.81	30407790.88	0.0064	0.0058
Venus	78545-07-06 11:46 G	30409218.89	30409218.99	30409219.10	0.0065	0.0058

Venus	78546-02-16 16:20 G	30409443.97	30409444.18	30409444.39	0.0066	0.0020
Venus	78546-09-29 20:39 G	30409669.16	30409669.36	30409669.58	0.0066	0.0019
Venus	78547-05-13 01:12 G	30409894.45	30409894.55	30409894.67	0.0066	0.0057
Mercury	78629-02-13 03:22 G	30439755.61	30439755.64	30439755.68	0.0081	0.0079
Mercury	78629-05-12 04:48 G	30439843.61	30439843.70	30439843.82	0.0081	0.0058
Mercury	78629-08-08 06:29 G	30439931.64	30439931.77	30439931.91	0.0081	0.0037
Mercury	78629-11-04 08:10 G	30440019.69	30440019.84	30440019.99	0.0081	0.0016
Mercury	78630-01-31 09:51 G	30440107.76	30440107.91	30440108.06	0.0081	0.0005
Mercury	78630-04-29 11:17 G	30440195.83	30440195.97	30440196.12	0.0081	0.0026
Mercury	78630-07-26 12:44 G	30440283.91	30440284.03	30440284.16	0.0080	0.0046
Mercury	78630-10-22 14:10 G	30440372.02	30440372.09	30440372.19	0.0080	0.0067
Venus	78633-10-19 23:46 G	30441465.30	30441465.49	30441465.70	0.0079	0.0034
Venus	78634-06-02 09:51 G	30441690.71	30441690.91	30441691.11	0.0078	0.0033
Mercury	78785-10-28 09:08 G	30496990.81	30496990.88	30496990.98	0.0063	0.0053
Mercury	78786-01-24 10:05 G	30497078.81	30497078.92	30497079.05	0.0063	0.0043
Mercury	78786-04-22 10:48 G	30497166.82	30497166.95	30497167.11	0.0063	0.0032
Mercury	78786-07-19 11:46 G	30497254.85	30497254.99	30497255.16	0.0063	0.0022
Mercury	78786-10-15 12:58 G	30497342.88	30497343.04	30497343.20	0.0063	0.0011
Earth	78786-11-28 09:22 G	30497386.64	30497386.89	30497387.15	0.0063	0.0003
Moon	78786-11-28 12:29 G	30497386.76	30497387.02	30497387.28	0.0063	0.0002 *
Mercury	78787-01-11 13:41 G	30497430.91	30497431.07	30497431.24	0.0063	0.0002
Mercury	78787-04-09 14:39 G	30497518.95	30497519.11	30497519.27	0.0063	0.0011
Mercury	78787-07-06 15:22 G	30497606.99	30497607.14	30497607.30	0.0064	0.0022
Mercury	78787-10-02 16:05 G	30497695.05	30497695.17	30497695.32	0.0064	0.0033
Mercury	78787-12-29 16:48 G	30497783.10	30497783.20	30497783.34	0.0064	0.0044
Mercury	78788-03-26 18:00 G	30497871.17	30497871.25	30497871.34	0.0064	0.0054
Venus	78792-10-29 13:27 G	30499548.88	30499549.06	30499549.26	0.0065	0.0033
Venus	78793-06-11 17:46 G	30499774.03	30499774.24	30499774.47	0.0066	0.0006
Venus	78794-01-22 22:05 G	30499999.27	30499999.42	30499999.60	0.0066	0.0044
Mercury	78875-12-28 15:22 G	30529924.07	30529924.14	30529924.22	0.0081	0.0070

Mercury	78876-03-25 17:03 G	30530012.09	30530012.21	30530012.33	0.0081	0.0049
Earth	78876-05-29 16:20 G	30530077.00	30530077.18	30530077.36	0.0081	0.0058
Moon	78876-05-29 18:58 G	30530077.16	30530077.29	30530077.49	0.0081	0.0063 *
Mercury	78876-06-21 18:29 G	30530100.13	30530100.27	30530100.42	0.0081	0.0029
Mercury	78876-09-17 20:10 G	30530188.19	30530188.34	30530188.49	0.0081	0.0008
Mercury	78876-12-14 21:36 G	30530276.26	30530276.40	30530276.56	0.0081	0.0014
Mercury	78877-03-12 23:17 G	30530364.33	30530364.47	30530364.61	0.0080	0.0034
Mercury	78877-06-09 00:44 G	30530452.43	30530452.53	30530452.65	0.0080	0.0055
Mercury	78877-09-05 02:10 G	30530540.55	30530540.59	30530540.65	0.0080	0.0075
Venus	78880-06-30 19:27 G	30531570.17	30531570.31	30531570.49	0.0079	0.0056
Venus	78881-02-11 05:46 G	30531795.53	30531795.74	30531795.97	0.0078	0.0012
Venus	78881-09-24 15:36 G	30532021.13	30532021.15	30532021.18	0.0078	0.0077

# 80TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 80th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	79032-06-15 19:27 G	30587071.27	30587071.31	30587071.37	0.0063	0.0059		
Mercury	79032-09-11 20:10 G	30587159.25	30587159.34	30587159.46	0.0063	0.0049		
Mercury	79032-12-08 21:08 G	30587247.26	30587247.38	30587247.52	0.0063	0.0038		
Mercury	79033-03-06 22:20 G	30587335.28	30587335.43	30587335.58	0.0063	0.0027		
Mercury	79033-06-02 23:03 G	30587423.31	30587423.46	30587423.63	0.0063	0.0017		
Mercury	79033-08-30 00:00 G	30587511.34	30587511.50	30587511.67	0.0063	0.0006		

Mercury	79033-11-26 00:58 G	30587599.38	30587599.54	30587599.71	0.0063	0.0005
Earth	79033-12-01 19:27 G	30587605.08	30587605.31	30587605.57	0.0063	0.0020
Moon	79033-12-01 22:48 G	30587605.23	30587605.45	30587605.70	0.0063	0.0022 *
Mercury	79034-02-22 01:41 G	30587687.42	30587687.57	30587687.74	0.0063	0.0016
Mercury	79034-05-21 02:24 G	30587775.47	30587775.60	30587775.76	0.0064	0.0027
Mercury	79034-08-17 03:36 G	30587863.52	30587863.65	30587863.78	0.0064	0.0037
Mercury	79034-11-13 04:20 G	30587951.58	30587951.68	30587951.80	0.0064	0.0048
Mercury	79035-02-09 05:03 G	30588039.67	30588039.71	30588039.79	0.0064	0.0059
Venus	79039-07-12 09:22 G	30589653.77	30589653.89	30589654.06	0.0065	0.0049
Venus	79040-02-22 14:24 G	30589878.88	30589879.10	30589879.32	0.0066	0.0011
Venus	79040-10-04 18:44 G	30590104.09	30590104.28	30590104.49	0.0066	0.0028
Mercury	79122-11-13 02:24 G	30620092.53	30620092.60	30620092.68	0.0081	0.0070
Mercury	79123-02-09 04:05 G	30620180.55	30620180.67	30620180.79	0.0081	0.0049
Mercury	79123-05-08 05:32 G	30620268.59	30620268.73	30620268.88	0.0081	0.0029
Earth	79123-06-04 01:27 G	30620295.34	30620295.56	30620295.80	0.0081	0.0039
Moon	79123-06-04 05:17 G	30620295.50	30620295.72	30620295.97	0.0081	0.0035 *
Mercury	79123-08-04 07:12 G	30620356.65	30620356.80	30620356.95	0.0081	0.0008
Mercury	79123-10-31 08:53 G	30620444.72	30620444.87	30620445.02	0.0081	0.0013
Mercury	79124-01-27 10:20 G	30620532.79	30620532.93	30620533.07	0.0081	0.0034
Mercury	79124-04-24 11:32 G	30620620.89	30620620.98	30620621.11	0.0080	0.0055
Mercury	79124-07-21 13:27 G	30620709.01	30620709.06	30620709.12	0.0080	0.0075
Venus	79127-10-25 22:48 G	30621900.25	30621900.45	30621900.68	0.0078	0.0021
Venus	79128-06-07 08:39 G	30622125.70	30622125.86	30622126.05	0.0078	0.0046
Mercury	79279-04-30 05:46 G	30677239.71	30677239.74	30677239.79	0.0063	0.0061
Mercury	79279-07-27 06:29 G	30677327.69	30677327.77	30677327.88	0.0063	0.0051
Mercury	79279-10-23 07:27 G	30677415.70	30677415.81	30677415.95	0.0063	0.0040
Moon	79279-12-03 14:10 G	30677457.06	30677457.09	30677457.18	0.0063	0.0061
Mercury	79280-01-19 08:24 G	30677503.71	30677503.85	30677504.00	0.0063	0.0030
Mercury	79280-04-16 09:08 G	30677591.74	30677591.88	30677592.05	0.0063	0.0020
Mercury	79280-07-13 10:20 G	30677679.77	30677679.93	30677680.09	0.0063	0.0008

Mercury	79280-10-09 11:17 G	30677767.80	30677767.97	30677768.13	0.0063	0.0003
Earth	79280-12-04 01:56 G	30677823.36	30677823.58	30677823.83	0.0063	0.0023
Moon	79280-12-04 04:48 G	30677823.47	30677823.70	30677823.95	0.0063	0.0019 *
Mercury	79281-01-05 12:00 G	30677855.84	30677856.00	30677856.16	0.0063	0.0013
Mercury	79281-04-03 12:58 G	30677943.89	30677944.04	30677944.19	0.0063	0.0024
Mercury	79281-06-30 13:41 G	30678031.94	30678032.07	30678032.21	0.0064	0.0035
Mercury	79281-09-26 14:24 G	30678120.00	30678120.10	30678120.23	0.0064	0.0046
Mercury	79281-12-23 15:08 G	30678208.08	30678208.13	30678208.23	0.0064	0.0057
Venus	79286-11-03 07:27 G	30679983.65	30679983.81	30679984.02	0.0065	0.0037
Venus	79287-06-16 12:29 G	30680208.80	30680209.02	30680209.24	0.0066	0.0002
Mars	79288-01-24 17:03 G	30680430.91	30680431.21	30680431.54	0.0066	0.0018
Venus	79288-01-27 16:48 G	30680434.04	30680434.20	30680434.38	0.0066	0.0041
Mercury	79369-09-26 12:29 G	30710260.99	30710261.02	30710261.07	0.0081	0.0079
Mercury	79369-12-23 14:10 G	30710348.99	30710349.09	30710349.20	0.0081	0.0058
Mercury	79370-03-21 15:36 G	30710437.03	30710437.15	30710437.30	0.0081	0.0037
Earth	79370-06-06 06:00 G	30710513.54	30710513.75	30710514.01	0.0081	0.0037
Moon	79370-06-06 09:36 G	30710513.68	30710513.90	30710514.15	0.0081	0.0036 *
Mercury	79370-06-17 17:17 G	30710525.08	30710525.22	30710525.37	0.0081	0.0016
Mercury	79370-09-13 18:58 G	30710613.14	30710613.29	30710613.44	0.0081	0.0005
Mercury	79370-12-10 20:24 G	30710701.21	30710701.35	30710701.50	0.0081	0.0026
Mercury	79371-03-08 21:51 G	30710789.29	30710789.41	30710789.54	0.0080	0.0046
Mercury	79371-06-04 23:32 G	30710877.40	30710877.48	30710877.57	0.0080	0.0067
Venus	79374-07-06 13:41 G	30712004.94	30712005.07	30712005.21	0.0079	0.0062
Venus	79375-02-16 23:46 G	30712230.27	30712230.49	30712230.71	0.0078	0.0005
Mars	79375-08-19 16:48 G	30712413.91	30712414.20	30712414.51	0.0078	0.0020
Venus	79375-09-30 09:08 G	30712455.81	30712455.88	30712455.99	0.0078	0.0071
Mercury	79526-06-11 16:05 G	30767496.12	30767496.17	30767496.27	0.0063	0.0056
Mercury	79526-09-07 17:17 G	30767584.11	30767584.22	30767584.34	0.0063	0.0045
Mercury	79526-12-04 18:00 G	30767672.13	30767672.25	30767672.40	0.0063	0.0035
Mercury	79527-03-02 18:58 G	30767760.15	30767760.29	30767760.45	0.0063	0.0024

Mercury	79527-05-29 19:56 G	30767848.18	30767848.33	30767848.50	0.0063	0.0014
Mercury	79527-08-25 20:53 G	30767936.21	30767936.37	30767936.54	0.0063	0.0003
Mercury	79527-11-21 21:51 G	30768024.25	30768024.41	30768024.57	0.0063	0.0008
Earth	79527-12-09 06:29 G	30768041.54	30768041.77	30768042.02	0.0063	0.0020
Moon	79527-12-09 08:10 G	30768041.62	30768041.84	30768042.09	0.0063	0.0020 *
Mercury	79528-02-17 22:48 G	30768112.29	30768112.45	30768112.60	0.0063	0.0019
Mercury	79528-05-15 23:32 G	30768200.34	30768200.48	30768200.63	0.0063	0.0030
Mercury	79528-08-12 00:00 G	30768288.40	30768288.50	30768288.65	0.0064	0.0041
Mercury	79528-11-08 01:27 G	30768376.46	30768376.56	30768376.65	0.0064	0.0051
Mercury	79529-02-04 01:56 G	30768464.56	30768464.58	30768464.63	0.0064	0.0062
Venus	79533-07-16 23:46 G	30770088.49	30770088.49	30770088.51	0.0065	0.0065
Venus	79534-02-27 04:05 G	30770313.49	30770313.67	30770313.89	0.0065	0.0028
Venus	79534-10-10 09:08 G	30770538.66	30770538.88	30770539.10	0.0066	0.0011
Venus	79535-05-23 13:27 G	30770763.93	30770764.06	30770764.21	0.0066	0.0050
Mercury	79616-11-06 23:17 G	30800517.43	30800517.47	30800517.54	0.0081	0.0075
Mercury	79617-02-03 00:58 G	30800605.43	30800605.54	30800605.66	0.0081	0.0054
Mercury	79617-05-02 02:39 G	30800693.47	30800693.61	30800693.75	0.0081	0.0033
Earth	79617-06-09 06:00 G	30800731.59	30800731.75	30800731.96	0.0081	0.0056
Moon	79617-06-09 08:10 G	30800731.70	30800731.84	30800732.04	0.0081	0.0060 *
Mercury	79617-07-29 04:05 G	30800781.52	30800781.67	30800781.83	0.0081	0.0013
Mercury	79617-10-25 05:46 G	30800869.59	30800869.74	30800869.89	0.0081	0.0008
Mercury	79618-01-21 07:12 G	30800957.66	30800957.80	30800957.95	0.0081	0.0029
Mercury	79618-04-19 08:39 G	30801045.75	30801045.86	30801045.99	0.0080	0.0049
Mercury	79618-07-16 10:20 G	30801133.86	30801133.93	30801134.00	0.0080	0.0070
Venus	79621-10-29 10:34 G	30802334.79	30802334.94	30802335.14	0.0079	0.0050
Venus	79622-06-11 20:53 G	30802560.16	30802560.37	30802560.60	0.0078	0.0018
Mercury	79773-07-22 01:41 G	30857752.52	30857752.57	30857752.65	0.0063	0.0058
Mercury	79773-10-18 02:39 G	30857840.51	30857840.61	30857840.73	0.0063	0.0047
Mercury	79774-01-14 03:22 G	30857928.53	30857928.64	30857928.79	0.0063	0.0037
Mercury	79774-04-12 04:34 G	30858016.55	30858016.69	30858016.85	0.0063	0.0026

Mercury	79774-07-09 05:32 G	30858104.57	30858104.73	30858104.89	0.0063	0.0015
Mercury	79774-10-05 06:29 G	30858192.61	30858192.77	30858192.94	0.0063	0.0005
Earth	79774-12-11 06:29 G	30858259.52	30858259.77	30858260.03	0.0063	0.0002
Moon	79774-12-11 06:58 G	30858259.55	30858259.79	30858260.04	0.0063	0.0004 *
Mercury	79775-01-01 07:12 G	30858280.64	30858280.80	30858280.97	0.0063	0.0007
Mercury	79775-03-30 08:10 G	30858368.69	30858368.84	30858369.00	0.0063	0.0017
Mercury	79775-06-26 08:53 G	30858456.73	30858456.87	30858457.03	0.0063	0.0028
Mercury	79775-09-22 09:36 G	30858544.79	30858544.90	30858545.05	0.0063	0.0039
Mercury	79775-12-19 10:48 G	30858632.85	30858632.95	30858633.06	0.0064	0.0049
Mercury	79776-03-16 11:32 G	30858720.94	30858720.98	30858721.05	0.0064	0.0060
Venus	79781-06-20 21:36 G	30860643.22	30860643.40	30860643.61	0.0066	0.0029
Venus	79782-02-01 02:10 G	30860868.38	30860868.59	30860868.82	0.0066	0.0010
Venus	79782-09-14 06:58 G	30861093.65	30861093.79	30861093.94	0.0066	0.0048
Mercury	79864-03-16 10:20 G	30890861.85	30890861.93	30890862.04	0.0081	0.0062
Mercury	79864-06-12 12:00 G	30890949.88	30890950.00	30890950.14	0.0081	0.0041
Mercury	79864-09-08 13:41 G	30891037.92	30891038.07	30891038.22	0.0081	0.0020
Mercury	79864-12-05 15:08 G	30891125.98	30891126.13	30891126.29	0.0081	0.0002
Mercury	79865-03-03 16:48 G	30891214.05	30891214.20	30891214.35	0.0081	0.0021
Mercury	79865-05-30 18:15 G	30891302.13	30891302.26	30891302.39	0.0081	0.0042
Mercury	79865-08-26 19:27 G	30891390.23	30891390.31	30891390.42	0.0080	0.0063
Venus	79869-02-21 04:34 G	30892664.53	30892664.69	30892664.88	0.0079	0.0050
Venus	79869-10-04 14:39 G	30892889.91	30892890.11	30892890.34	0.0078	0.0018

# 81ST MILLENNIUM CE

This is a list of transits visible from Pluto in the 81st millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	80020-11-28 11:32	G	30948096.90	30948096.98	30948097.08	0.0063	0.0053	
Mercury	80021-02-24 12:15	G	30948184.91	30948185.01	30948185.15	0.0063	0.0043	
Mercury	80021-05-23 13:12	G	30948272.92	30948273.05	30948273.21	0.0063	0.0032	
Mercury	80021-08-19 14:24	G	30948360.95	30948361.10	30948361.26	0.0063	0.0021	
Mercury	80021-11-15 15:08	G	30948448.98	30948449.13	30948449.30	0.0063	0.0011	
Moon	80021-12-14 02:39	G	30948477.40	30948477.61	30948477.85	0.0063	0.0027	
Earth	80021-12-14 03:22	G	30948477.42	30948477.64	30948477.90	0.0063	0.0024	*
Mercury	80022-02-11 16:20	G	30948537.01	30948537.18	30948537.34	0.0063	0.0001	
Mercury	80022-05-10 17:03	G	30948625.05	30948625.21	30948625.38	0.0063	0.0011	
Mercury	80022-08-06 17:46	G	30948713.10	30948713.24	30948713.41	0.0063	0.0022	
Mercury	80022-11-02 18:29	G	30948801.15	30948801.27	30948801.43	0.0063	0.0033	
Earth	80022-12-15 13:27	G	30948844.04	30948844.06	30948844.12	0.0063	0.0063	
Mercury	80023-01-29 19:41	G	30948889.21	30948889.32	30948889.45	0.0063	0.0043	
Mercury	80023-04-27 20:24	G	30948977.28	30948977.35	30948977.45	0.0063	0.0054	
Venus	80028-10-13 13:12	G	30950972.89	30950973.05	30950973.25	0.0065	0.0037	
Mars	80029-02-16 09:36	G	30951098.74	30951098.90	30951099.09	0.0066	0.0055	
Venus	80029-05-26 18:00	G	30951198.03	30951198.25	30951198.47	0.0066	0.0002	
Venus	80030-01-06 22:20	G	30951423.27	30951423.43	30951423.61	0.0066	0.0041	
Mercury	80111-04-27 18:58	G	30981118.29	30981118.29	30981118.29	0.0081	0.0081	
Mercury	80111-07-24 20:24	G	30981206.25	30981206.35	30981206.45	0.0081	0.0060	
Mercury	80111-10-20 22:05	G	30981294.29	30981294.42	30981294.55	0.0081	0.0040	
Mercury	80112-01-16 23:32	G	30981382.33	30981382.48	30981382.63	0.0081	0.0019	
Mercury	80112-04-14 00:58	G	30981470.39	30981470.54	30981470.70	0.0081	0.0003	
Moon	80112-06-16 16:48	G	30981533.95	30981534.20	30981534.47	0.0081	0.0021	
Earth	80112-06-16 18:15	G	30981534.01	30981534.26	30981534.51	0.0081	0.0021	*
Mercury	80112-07-11 02:24	G	30981558.46	30981558.60	30981558.75	0.0081	0.0023	
Mercury	80112-10-07 04:05	G	30981646.54	30981646.67	30981646.80	0.0081	0.0043	



Mercury	80113-01-03 05:32 G	30981734.64	30981734.73	30981734.83	0.0080	0.0064
Venus	80116-06-15 18:58 G	30982994.18	30982994.29	30982994.43	0.0079	0.0065
Venus	80117-01-27 05:03 G	30983219.49	30983219.71	30983219.94	0.0078	0.0003
Venus	80117-09-09 14:24 G	30983445.02	30983445.10	30983445.23	0.0078	0.0069
Mercury	80268-04-06 19:41 G	31038441.27	31038441.32	31038441.41	0.0063	0.0057
Mercury	80268-07-03 20:53 G	31038529.27	31038529.37	31038529.49	0.0063	0.0046
Mercury	80268-09-29 21:51 G	31038617.28	31038617.41	31038617.55	0.0063	0.0035
Mercury	80268-12-26 22:34 G	31038705.30	31038705.44	31038705.61	0.0063	0.0025
Mercury	80269-03-24 23:46 G	31038793.33	31038793.49	31038793.65	0.0063	0.0014
Mercury	80269-06-21 00:44 G	31038881.37	31038881.53	31038881.70	0.0063	0.0003
Mercury	80269-09-17 01:41 G	31038969.40	31038969.57	31038969.73	0.0063	0.0007
Mercury	80269-12-14 02:24 G	31039057.45	31039057.60	31039057.76	0.0063	0.0018
Earth	80269-12-18 05:46 G	31039061.51	31039061.74	31039061.99	0.0063	0.0021
Moon	80269-12-18 06:44 G	31039061.53	31039061.78	31039062.03	0.0063	0.0021 *
Mercury	80270-03-12 03:22 G	31039145.50	31039145.64	31039145.79	0.0063	0.0029
Mercury	80270-06-08 04:05 G	31039233.55	31039233.67	31039233.81	0.0063	0.0040
Mercury	80270-09-04 04:48 G	31039321.62	31039321.70	31039321.82	0.0063	0.0051
Mercury	80270-12-01 05:32 G	31039409.71	31039409.73	31039409.80	0.0063	0.0062
Venus	80276-02-06 01:41 G	31041302.47	31041302.57	31041302.71	0.0065	0.0055
Venus	80276-09-18 06:15 G	31041527.56	31041527.76	31041527.99	0.0066	0.0017
Venus	80277-05-01 10:48 G	31041752.76	31041752.95	31041753.17	0.0066	0.0023
Venus	80277-12-12 15:08 G	31041978.08	31041978.13	31041978.22	0.0066	0.0062
Mercury	80358-12-01 04:48 G	31071550.64	31071550.70	31071550.78	0.0081	0.0071
Mercury	80359-02-27 06:29 G	31071638.66	31071638.77	31071638.89	0.0081	0.0050
Mercury	80359-05-26 07:56 G	31071726.70	31071726.83	31071726.98	0.0081	0.0029
Moon	80359-06-19 21:36 G	31071751.29	31071751.40	31071751.58	0.0081	0.0069
Earth	80359-06-19 22:20 G	31071751.33	31071751.43	31071751.56	0.0081	0.0072 *
Mercury	80359-08-22 09:36 G	31071814.75	31071814.90	31071815.05	0.0081	0.0008
Mercury	80359-11-18 11:03 G	31071902.82	31071902.96	31071903.12	0.0081	0.0013
Mercury	80360-02-14 12:44 G	31071990.89	31071991.03	31071991.17	0.0081	0.0033

Mercury	80360-05-12 14:10 G	31072078.98	31072079.09	31072079.21	0.0081	0.0054
Mercury	80360-08-08 15:22 G	31072167.10	31072167.14	31072167.21	0.0080	0.0075
Venus	80364-05-21 15:36 G	31073548.95	31073549.15	31073549.37	0.0078	0.0027
Venus	80365-01-02 01:12 G	31073774.38	31073774.55	31073774.76	0.0078	0.0041
Mercury	80515-11-11 04:34 G	31128873.62	31128873.69	31128873.80	0.0063	0.0053
Mercury	80516-02-07 05:46 G	31128961.63	31128961.74	31128961.87	0.0063	0.0042
Mercury	80516-05-05 06:29 G	31129049.64	31129049.77	31129049.93	0.0063	0.0032
Mercury	80516-08-01 07:41 G	31129137.67	31129137.82	31129137.98	0.0063	0.0021
Mercury	80516-10-28 08:39 G	31129225.70	31129225.86	31129226.03	0.0063	0.0010
Earth	80516-12-20 20:10 G	31129279.11	31129279.34	31129279.57	0.0063	0.0026
Moon	80516-12-20 21:36 G	31129279.18	31129279.40	31129279.64	0.0063	0.0029 *
Mercury	80517-01-24 09:36 G	31129313.73	31129313.90	31129314.07	0.0063	0.0001
Mercury	80517-04-22 10:20 G	31129401.77	31129401.93	31129402.10	0.0063	0.0011
Mercury	80517-07-19 11:03 G	31129489.82	31129489.96	31129490.13	0.0063	0.0022
Mercury	80517-10-15 12:15 G	31129577.87	31129578.01	31129578.15	0.0063	0.0033
Earth	80517-12-22 05:32 G	31129645.67	31129645.73	31129645.84	0.0063	0.0059
Moon	80517-12-22 06:15 G	31129645.74	31129645.76	31129645.82	0.0063	0.0063 *
Mercury	80518-01-11 12:58 G	31129665.93	31129666.04	31129666.17	0.0063	0.0043
Mercury	80518-04-09 13:41 G	31129754.01	31129754.07	31129754.17	0.0063	0.0054
Venus	80524-01-11 16:48 G	31131857.05	31131857.20	31131857.40	0.0065	0.0040
Venus	80524-08-23 21:51 G	31132082.19	31132082.41	31132082.63	0.0066	0.0001
Venus	80525-04-06 01:41 G	31132307.42	31132307.57	31132307.77	0.0066	0.0039
Mercury	80606-07-06 13:27 G	31161983.01	31161983.06	31161983.15	0.0081	0.0072
Mercury	80606-10-02 15:22 G	31162071.03	31162071.14	31162071.26	0.0081	0.0050
Mercury	80606-12-29 17:03 G	31162159.07	31162159.21	31162159.35	0.0081	0.0030
Mercury	80607-03-27 18:29 G	31162247.12	31162247.27	31162247.42	0.0081	0.0009
Mercury	80607-06-23 19:56 G	31162335.18	31162335.33	31162335.48	0.0081	0.0012
Earth	80607-06-24 03:22 G	31162335.38	31162335.64	31162335.91	0.0081	0.0003 *
Moon	80607-06-24 03:51 G	31162335.41	31162335.66	31162335.92	0.0081	0.0001 *
Mercury	80607-09-19 21:22 G	31162423.26	31162423.39	31162423.54	0.0081	0.0033

Mercury	80607-12-16 23:03 G	31162511.35	31162511.46	31162511.58	0.0081	0.0053
Mercury	80608-03-14 00:15 G	31162599.47	31162599.51	31162599.59	0.0080	0.0074
Venus	80611-09-13 22:05 G	31163878.35	31163878.42	31163878.54	0.0079	0.0071
Venus	80612-04-26 08:53 G	31164103.65	31164103.87	31164104.09	0.0078	0.0003
Venus	80612-12-07 18:15 G	31164329.15	31164329.26	31164329.40	0.0078	0.0064
Mercury	80763-06-16 12:15 G	31219305.96	31219306.01	31219306.11	0.0063	0.0056
Mercury	80763-09-12 13:27 G	31219393.96	31219394.06	31219394.19	0.0063	0.0045
Mercury	80763-12-09 14:10 G	31219481.97	31219482.09	31219482.25	0.0063	0.0035
Mercury	80764-03-06 15:22 G	31219569.99	31219570.14	31219570.30	0.0063	0.0024
Mercury	80764-06-02 16:20 G	31219658.02	31219658.18	31219658.35	0.0063	0.0013
Mercury	80764-08-29 17:17 G	31219746.06	31219746.22	31219746.39	0.0063	0.0003
Mercury	80764-11-25 18:15 G	31219834.09	31219834.26	31219834.42	0.0063	0.0008
Moon	80764-12-24 14:53 G	31219862.88	31219863.12	31219863.37	0.0063	0.0004
Earth	80764-12-24 15:36 G	31219862.90	31219863.15	31219863.41	0.0063	0.0002 *
Mercury	80765-02-21 18:58 G	31219922.14	31219922.29	31219922.46	0.0063	0.0019
Mercury	80765-05-20 19:56 G	31220010.19	31220010.33	31220010.48	0.0063	0.0029
Mercury	80765-08-16 20:39 G	31220098.25	31220098.36	31220098.50	0.0063	0.0040
Mercury	80765-11-12 21:22 G	31220186.32	31220186.39	31220186.51	0.0063	0.0051
Mercury	80766-02-08 22:34 G	31220274.42	31220274.44	31220274.48	0.0063	0.0062
Venus	80771-12-17 05:32 G	31222411.56	31222411.73	31222411.93	0.0065	0.0034
Mars	80772-01-30 00:15 G	31222455.24	31222455.51	31222455.82	0.0066	0.0028
Venus	80772-07-29 10:05 G	31222636.71	31222636.92	31222637.15	0.0066	0.0006
Venus	80773-03-11 14:10 G	31222861.96	31222862.09	31222862.28	0.0066	0.0045
Mercury	80854-02-07 21:36 G	31252415.39	31252415.40	31252415.43	0.0081	0.0081
Mercury	80854-05-06 23:03 G	31252503.37	31252503.46	31252503.57	0.0081	0.0060
Mercury	80854-08-03 00:44 G	31252591.41	31252591.53	31252591.67	0.0081	0.0039
Mercury	80854-10-30 02:24 G	31252679.45	31252679.60	31252679.75	0.0081	0.0018
Mercury	80855-01-26 03:51 G	31252767.51	31252767.66	31252767.81	0.0081	0.0003
Mercury	80855-04-24 05:17 G	31252855.58	31252855.72	31252855.87	0.0081	0.0023
Moon	80855-06-27 01:27 G	31252919.34	31252919.56	31252919.79	0.0081	0.0044

Earth	80855-06-27 02:53 G	31252919.43	31252919.62	31252919.86	0.0081	0.0048	*
Mercury	80855-07-21 06:44 G	31252943.66	31252943.78	31252943.92	0.0081	0.0044	
Mercury	80855-10-17 08:24 G	31253031.76	31253031.85	31253031.94	0.0081	0.0064	
Venus	80859-08-18 12:15 G	31254432.89	31254433.01	31254433.19	0.0078	0.0058	
Mars	80859-08-24 23:46 G	31254439.20	31254439.49	31254439.81	0.0078	0.0014	
Venus	80860-03-30 22:48 G	31254658.23	31254658.45	31254658.67	0.0078	0.0010	
Venus	80860-11-11 07:56 G	31254883.82	31254883.83	31254883.90	0.0078	0.0077	

# 82ND MILLENNIUM CE

This is a list of transits visible from Pluto in the 82nd millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	81011-01-19 20:10 G	31309738.31	31309738.34	31309738.38	0.0062	0.0061		
Mercury	81011-04-17 20:39 G	31309826.28	31309826.36	31309826.48	0.0062	0.0051		
Mercury	81011-07-14 21:51 G	31309914.29	31309914.41	31309914.54	0.0063	0.0040		
Mercury	81011-10-10 22:34 G	31310002.31	31310002.44	31310002.60	0.0063	0.0030		
Mercury	81012-01-06 23:46 G	31310090.33	31310090.49	31310090.65	0.0063	0.0019		
Mercury	81012-04-04 00:29 G	31310178.36	31310178.52	31310178.69	0.0063	0.0009		
Mercury	81012-07-01 01:27 G	31310266.40	31310266.56	31310266.73	0.0063	0.0003		
Mercury	81012-09-27 02:24 G	31310354.44	31310354.60	31310354.77	0.0063	0.0013		
Mercury	81012-12-24 03:22 G	31310442.49	31310442.64	31310442.80	0.0063	0.0023		
Moon	81012-12-28 09:22 G	31310446.64	31310446.89	31310447.15	0.0063	0.0018		
Earth	81012-12-28 09:08 G	31310446.65	31310446.88	31310447.15	0.0063	0.0017	*	

Mercury	81013-03-22 04:05 G	31310530.54	31310530.67	31310530.82	0.0063	0.0034
Mercury	81013-06-18 04:48 G	31310618.60	31310618.70	31310618.83	0.0063	0.0045
Mercury	81013-09-14 06:00 G	31310706.68	31310706.75	31310706.83	0.0063	0.0056
Venus	81019-11-21 16:48 G	31312966.02	31312966.20	31312966.40	0.0065	0.0032
Venus	81020-07-03 21:36 G	31313191.18	31313191.40	31313191.61	0.0066	0.0007
Venus	81021-02-14 01:27 G	31313416.43	31313416.56	31313416.74	0.0066	0.0047
Mercury	81101-12-11 06:15 G	31342935.73	31342935.76	31342935.78	0.0081	0.0080
Mercury	81102-03-09 07:27 G	31343023.72	31343023.81	31343023.92	0.0081	0.0059
Mercury	81102-06-05 09:08 G	31343111.75	31343111.88	31343112.02	0.0081	0.0038
Mercury	81102-09-01 10:34 G	31343199.80	31343199.94	31343200.09	0.0081	0.0018
Mercury	81102-11-28 12:15 G	31343287.86	31343288.01	31343288.16	0.0081	0.0003
Mercury	81103-02-24 13:41 G	31343375.93	31343376.07	31343376.22	0.0081	0.0024
Mercury	81103-05-23 15:08 G	31343464.01	31343464.13	31343464.26	0.0081	0.0044
Earth	81103-07-01 20:24 G	31343503.29	31343503.35	31343503.48	0.0081	0.0075
Moon	81103-07-01 23:03 G	31343503.35	31343503.46	31343503.59	0.0081	0.0071 *
Mercury	81103-08-19 16:34 G	31343552.11	31343552.19	31343552.29	0.0081	0.0065
Venus	81107-07-24 23:03 G	31344987.33	31344987.46	31344987.62	0.0078	0.0058
Venus	81108-03-06 09:08 G	31345212.67	31345212.88	31345213.11	0.0078	0.0010
Venus	81108-10-17 18:58 G	31345438.26	31345438.29	31345438.34	0.0078	0.0076
Mercury	81258-11-20 03:08 G	31400258.62	31400258.63	31400258.68	0.0062	0.0062
Mercury	81259-02-16 04:20 G	31400346.59	31400346.68	31400346.78	0.0062	0.0051
Mercury	81259-05-15 05:03 G	31400434.60	31400434.71	31400434.85	0.0063	0.0041
Mercury	81259-08-11 06:15 G	31400522.62	31400522.76	31400522.91	0.0063	0.0030
Mercury	81259-11-07 06:58 G	31400610.64	31400610.79	31400610.96	0.0063	0.0020
Earth	81259-12-30 14:10 G	31400664.02	31400664.09	31400664.18	0.0063	0.0059
Moon	81259-12-30 14:53 G	31400664.10	31400664.12	31400664.15	0.0063	0.0062 *
Mercury	81260-02-03 08:10 G	31400698.67	31400698.84	31400699.01	0.0063	0.0009
Mercury	81260-05-01 09:08 G	31400786.71	31400786.88	31400787.04	0.0063	0.0002
Mercury	81260-07-28 09:51 G	31400874.75	31400874.91	31400875.08	0.0063	0.0013
Mercury	81260-10-24 10:48 G	31400962.80	31400962.95	31400963.11	0.0063	0.0023

Earth	81260-12-30 23:46 G	31401030.27	31401030.49	31401030.74	0.0063	0.0025
Moon	81260-12-31 00:58 G	31401030.34	31401030.54	31401030.79	0.0063	0.0028 *
Mercury	81261-01-20 11:17 G	31401050.85	31401050.97	31401051.13	0.0063	0.0034
Mercury	81261-04-18 12:29 G	31401138.91	31401139.02	31401139.15	0.0063	0.0044
Mercury	81261-07-15 13:12 G	31401226.99	31401227.05	31401227.15	0.0063	0.0055
Venus	81267-10-26 01:56 G	31403520.40	31403520.58	31403520.77	0.0065	0.0037
Venus	81268-06-07 06:29 G	31403745.55	31403745.77	31403745.99	0.0066	0.0002
Venus	81269-01-18 10:48 G	31403970.79	31403970.95	31403971.13	0.0066	0.0041
Mercury	81350-01-07 15:22 G	31433544.05	31433544.14	31433544.24	0.0081	0.0063
Mercury	81350-04-05 17:03 G	31433632.08	31433632.21	31433632.34	0.0081	0.0043
Mercury	81350-07-02 18:29 G	31433720.13	31433720.27	31433720.42	0.0081	0.0022
Mercury	81350-09-28 19:56 G	31433808.18	31433808.33	31433808.49	0.0081	0.0003
Mercury	81350-12-25 21:36 G	31433896.25	31433896.40	31433896.54	0.0081	0.0019
Mercury	81351-03-23 22:48 G	31433984.33	31433984.45	31433984.59	0.0081	0.0040
Mercury	81351-06-20 00:15 G	31434072.42	31434072.51	31434072.62	0.0081	0.0060
Mercury	81351-09-16 01:56 G	31434160.58	31434160.58	31434160.59	0.0080	0.0080
Venus	81355-06-28 07:56 G	31435541.72	31435541.83	31435541.97	0.0078	0.0065
Venus	81356-02-08 18:15 G	31435767.04	31435767.26	31435767.49	0.0078	0.0004
Venus	81356-09-21 03:36 G	31435992.58	31435992.65	31435992.77	0.0078	0.0070
Mercury	81506-12-19 11:32 G	31490866.90	31490866.98	31490867.06	0.0062	0.0054
Mercury	81507-03-17 12:00 G	31490954.90	31490955.00	31490955.14	0.0062	0.0044
Mercury	81507-06-13 13:12 G	31491042.91	31491043.05	31491043.20	0.0062	0.0033
Mercury	81507-09-09 13:56 G	31491130.94	31491131.08	31491131.25	0.0063	0.0023
Mercury	81507-12-06 15:08 G	31491218.97	31491219.13	31491219.30	0.0063	0.0012
Earth	81508-01-04 02:39 G	31491247.53	31491247.61	31491247.76	0.0063	0.0056
Moon	81508-01-04 03:08 G	31491247.54	31491247.63	31491247.76	0.0063	0.0056 *
Mercury	81508-03-03 16:05 G	31491307.00	31491307.17	31491307.34	0.0063	0.0001
Mercury	81508-05-30 17:03 G	31491395.04	31491395.21	31491395.37	0.0063	0.0009
Mercury	81508-08-26 17:46 G	31491483.09	31491483.24	31491483.40	0.0063	0.0020
Mercury	81508-11-22 18:29 G	31491571.14	31491571.27	31491571.43	0.0063	0.0031

Moon	81509-01-04 11:03 G	31491613.72	31491613.96	31491614.20	0.0063	0.0027
Earth	81509-01-04 12:58 G	31491613.82	31491614.04	31491614.28	0.0063	0.0028 *
Mercury	81509-02-18 19:27 G	31491659.20	31491659.31	31491659.45	0.0063	0.0041
Mercury	81509-05-17 20:10 G	31491747.27	31491747.34	31491747.45	0.0063	0.0052
Mercury	81509-08-13 21:22 G	31491835.38	31491835.39	31491835.42	0.0063	0.0063
Mars	81515-01-09 13:56 G	31493809.84	31493810.08	31493810.36	0.0065	0.0038
Venus	81515-10-01 09:08 G	31494074.76	31494074.88	31494075.06	0.0065	0.0047
Venus	81516-05-13 14:10 G	31494299.88	31494300.09	31494300.31	0.0066	0.0008
Venus	81516-12-24 18:29 G	31494525.09	31494525.27	31494525.48	0.0066	0.0032
Mercury	81597-11-08 21:51 G	31524064.39	31524064.41	31524064.47	0.0082	0.0078
Mercury	81598-02-04 23:32 G	31524152.39	31524152.48	31524152.60	0.0081	0.0057
Mercury	81598-05-04 00:58 G	31524240.42	31524240.54	31524240.69	0.0081	0.0037
Mercury	81598-07-31 02:39 G	31524328.47	31524328.61	31524328.76	0.0081	0.0016
Mercury	81598-10-27 04:20 G	31524416.53	31524416.68	31524416.83	0.0081	0.0005
Mercury	81599-01-23 05:46 G	31524504.60	31524504.74	31524504.88	0.0081	0.0026
Mercury	81599-04-21 06:58 G	31524592.68	31524592.79	31524592.93	0.0081	0.0047
Mercury	81599-07-18 08:39 G	31524680.78	31524680.86	31524680.95	0.0081	0.0067
Venus	81604-01-14 00:00 G	31526321.28	31526321.50	31526321.72	0.0078	0.0015
Venus	81604-08-26 09:22 G	31526546.75	31526546.89	31526547.08	0.0078	0.0052
Mercury	81754-10-19 17:32 G	31581387.21	31581387.23	31581387.29	0.0062	0.0061
Mercury	81755-01-15 18:29 G	31581475.19	31581475.27	31581475.39	0.0062	0.0050
Mercury	81755-04-13 19:27 G	31581563.20	31581563.31	31581563.45	0.0062	0.0040
Mercury	81755-07-10 20:24 G	31581651.21	31581651.35	31581651.51	0.0062	0.0029
Mercury	81755-10-06 21:22 G	31581739.24	31581739.39	31581739.56	0.0063	0.0019
Mercury	81756-01-02 22:34 G	31581827.27	31581827.44	31581827.61	0.0063	0.0008
Moon	81756-01-06 12:00 G	31581830.91	31581831.00	31581831.15	0.0063	0.0056
Earth	81756-01-06 13:27 G	31581831.02	31581831.06	31581831.18	0.0063	0.0060 *
Mercury	81756-03-30 23:32 G	31581915.31	31581915.48	31581915.64	0.0063	0.0003
Mercury	81756-06-27 00:15 G	31582003.35	31582003.51	31582003.68	0.0063	0.0013
Mercury	81756-09-23 00:58 G	31582091.40	31582091.54	31582091.71	0.0063	0.0024

Mercury	81756-12-20 02:10 G	31582179.45	31582179.59	31582179.73	0.0063	0.0034
Earth	81757-01-06 23:46 G	31582197.26	31582197.49	31582197.73	0.0063	0.0024
Moon	81757-01-07 02:53 G	31582197.39	31582197.62	31582197.87	0.0063	0.0021 *
Mercury	81757-03-18 02:53 G	31582267.51	31582267.62	31582267.75	0.0063	0.0045
Mercury	81757-06-14 03:36 G	31582355.59	31582355.65	31582355.74	0.0063	0.0056
Mars	81763-04-20 04:34 G	31584491.41	31584491.69	31584492.02	0.0065	0.0019
Venus	81763-09-04 15:51 G	31584629.08	31584629.16	31584629.25	0.0065	0.0060
Venus	81764-04-16 20:10 G	31584854.14	31584854.34	31584854.56	0.0066	0.0021
Venus	81764-11-28 00:44 G	31585079.33	31585079.53	31585079.75	0.0066	0.0018
Venus	81765-07-11 04:48 G	31585304.63	31585304.70	31585304.83	0.0066	0.0058
Mercury	81845-12-07 06:00 G	31614672.70	31614672.75	31614672.83	0.0082	0.0073
Mercury	81846-03-05 07:56 G	31614760.71	31614760.83	31614760.94	0.0081	0.0052
Mercury	81846-06-01 09:08 G	31614848.75	31614848.88	31614849.03	0.0081	0.0032
Mercury	81846-08-28 10:48 G	31614936.80	31614936.95	31614937.10	0.0081	0.0011
Mercury	81846-11-24 12:15 G	31615024.87	31615025.01	31615025.16	0.0081	0.0010
Mercury	81847-02-20 13:41 G	31615112.94	31615113.07	31615113.21	0.0081	0.0031
Mercury	81847-05-19 15:08 G	31615201.02	31615201.13	31615201.25	0.0081	0.0051
Moon	81847-07-11 02:39 G	31615253.54	31615253.61	31615253.73	0.0081	0.0075
Earth	81847-07-11 06:29 G	31615253.70	31615253.77	31615253.89	0.0081	0.0075 *
Mercury	81847-08-15 16:20 G	31615289.13	31615289.18	31615289.27	0.0081	0.0072
Venus	81851-12-19 05:17 G	31616875.52	31616875.72	31616875.92	0.0078	0.0037
Venus	81852-07-31 14:53 G	31617100.93	31617101.12	31617101.33	0.0078	0.0031

# 83RD MILLENNIUM CE

This is a list of transits visible from Pluto in the 83rd millennium CE.



PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	82002-11-17 00:29	G	31671995.49	31671995.52	31671995.58	0.0062	0.0060	
Mercury	82003-02-13 01:12	G	31672083.47	31672083.55	31672083.67	0.0062	0.0050	
Mercury	82003-05-12 02:24	G	31672171.48	31672171.60	31672171.74	0.0062	0.0039	
Mercury	82003-08-08 03:08	G	31672259.50	31672259.63	31672259.80	0.0062	0.0029	
Mercury	82003-11-04 04:20	G	31672347.52	31672347.68	31672347.85	0.0062	0.0018	
Mercury	82004-01-31 05:17	G	31672435.56	31672435.72	31672435.89	0.0063	0.0007	
Mercury	82004-04-28 06:15	G	31672523.59	31672523.76	31672523.93	0.0063	0.0004	
Mercury	82004-07-25 07:12	G	31672611.64	31672611.80	31672611.96	0.0063	0.0014	
Mercury	82004-10-21 07:56	G	31672699.68	31672699.83	31672699.99	0.0063	0.0025	
Moon	82005-01-10 05:17	G	31672780.47	31672780.72	31672780.97	0.0063	0.0014	
Earth	82005-01-10 08:24	G	31672780.61	31672780.85	31672781.11	0.0063	0.0015	*
Mercury	82005-01-17 08:53	G	31672787.74	31672787.87	31672788.02	0.0063	0.0035	
Mercury	82005-04-15 09:36	G	31672875.80	31672875.90	31672876.03	0.0063	0.0046	
Mercury	82005-07-12 10:20	G	31672963.88	31672963.93	31672964.03	0.0063	0.0057	
Mars	82011-07-30 16:20	G	31675173.12	31675173.18	31675173.26	0.0065	0.0064	
Venus	82012-03-22 00:58	G	31675408.38	31675408.54	31675408.73	0.0065	0.0040	
Venus	82012-11-02 06:00	G	31675633.53	31675633.75	31675633.97	0.0066	0.0001	
Venus	82013-06-15 10:05	G	31675858.76	31675858.92	31675859.11	0.0066	0.0039	
Mercury	82094-01-03 13:12	G	31705281.02	31705281.05	31705281.10	0.0082	0.0078	
Mercury	82094-04-01 14:39	G	31705369.02	31705369.11	31705369.23	0.0081	0.0057	
Mercury	82094-06-28 16:20	G	31705457.05	31705457.18	31705457.32	0.0081	0.0036	
Mercury	82094-09-24 17:46	G	31705545.10	31705545.24	31705545.39	0.0081	0.0016	
Mercury	82094-12-21 19:27	G	31705633.16	31705633.31	31705633.46	0.0081	0.0005	
Mercury	82095-03-19 20:53	G	31705721.23	31705721.37	31705721.51	0.0081	0.0025	
Mercury	82095-06-15 22:05	G	31705809.31	31705809.42	31705809.55	0.0081	0.0046	
Earth	82095-07-13 09:51	G	31705836.70	31705836.91	31705837.14	0.0081	0.0043	
Moon	82095-07-13 12:44	G	31705836.81	31705837.03	31705837.28	0.0081	0.0039	*

Mercury	82095-09-11 23:32 G	31705897.41	31705897.48	31705897.58	0.0081	0.0066
Mars	82099-02-22 14:24 G	31707156.89	31707157.10	31707157.34	0.0079	0.0054
Venus	82099-11-22 06:29 G	31707429.70	31707429.77	31707429.88	0.0078	0.0071
Venus	82100-07-05 16:48 G	31707654.98	31707655.20	31707655.43	0.0078	0.0003
Venus	82101-02-16 02:10 G	31707880.49	31707880.59	31707880.74	0.0078	0.0064
Mercury	82250-12-15 06:44 G	31762603.78	31762603.78	31762603.83	0.0062	0.0062
Mercury	82251-03-13 07:41 G	31762691.74	31762691.82	31762691.93	0.0062	0.0051
Mercury	82251-06-09 08:53 G	31762779.75	31762779.87	31762780.01	0.0062	0.0040
Mercury	82251-09-05 09:36 G	31762867.77	31762867.90	31762868.06	0.0062	0.0031
Mercury	82251-12-02 10:48 G	31762955.80	31762955.95	31762956.12	0.0062	0.0020
Mercury	82252-02-28 11:46 G	31763043.83	31763043.99	31763044.16	0.0063	0.0009
Mercury	82252-05-26 12:44 G	31763131.86	31763132.03	31763132.20	0.0063	0.0002
Mercury	82252-08-22 13:27 G	31763219.91	31763220.06	31763220.24	0.0063	0.0013
Mercury	82252-11-18 14:24 G	31763307.95	31763308.10	31763308.27	0.0063	0.0023
Earth	82253-01-13 15:51 G	31763363.91	31763364.16	31763364.42	0.0063	0.0001
Moon	82253-01-13 19:12 G	31763364.05	31763364.30	31763364.57	0.0063	0.0004 *
Mercury	82253-02-14 15:08 G	31763396.01	31763396.13	31763396.29	0.0063	0.0034
Mercury	82253-05-13 16:20 G	31763484.07	31763484.18	31763484.31	0.0063	0.0044
Mercury	82253-08-09 17:03 G	31763572.15	31763572.21	31763572.31	0.0063	0.0055
Venus	82260-02-25 04:34 G	31765962.65	31765962.69	31765962.80	0.0065	0.0062
Venus	82260-10-07 09:22 G	31766187.70	31766187.89	31766188.11	0.0066	0.0023
Venus	82261-05-20 14:10 G	31766412.88	31766413.09	31766413.31	0.0066	0.0017
Venus	82261-12-31 18:15 G	31766638.17	31766638.26	31766638.39	0.0066	0.0057
Mercury	82342-04-30 21:51 G	31795977.32	31795977.41	31795977.50	0.0082	0.0063
Mercury	82342-07-27 23:03 G	31796065.34	31796065.46	31796065.60	0.0081	0.0043
Mercury	82342-10-24 00:44 G	31796153.39	31796153.53	31796153.68	0.0081	0.0022
Mercury	82343-01-20 02:10 G	31796241.44	31796241.59	31796241.74	0.0081	0.0002
Mercury	82343-04-18 03:36 G	31796329.51	31796329.65	31796329.80	0.0081	0.0020
Mercury	82343-07-15 05:03 G	31796417.59	31796417.71	31796417.85	0.0081	0.0040
Moon	82343-07-17 10:20 G	31796419.68	31796419.93	31796420.19	0.0081	0.0010

Earth	82343-07-17 12:29 G	31796419.77	31796420.02	31796420.29	0.0081	0.0011	*
Mercury	82343-10-11 06:44 G	31796505.68	31796505.78	31796505.88	0.0081	0.0060	
Mercury	82344-01-07 07:56 G	31796593.83	31796593.83	31796593.85	0.0081	0.0080	
Mars	82347-06-05 05:03 G	31797838.40	31797838.71	31797839.03	0.0079	0.0001	
Venus	82348-06-09 18:29 G	31798209.08	31798209.27	31798209.47	0.0078	0.0037	
Venus	82349-01-21 04:34 G	31798434.49	31798434.69	31798434.89	0.0078	0.0030	
Mercury	82499-04-09 13:27 G	31853300.01	31853300.06	31853300.15	0.0062	0.0057	
Mercury	82499-07-06 14:24 G	31853388.00	31853388.10	31853388.23	0.0062	0.0046	
Mercury	82499-10-02 15:36 G	31853476.02	31853476.15	31853476.29	0.0062	0.0035	
Mercury	82499-12-29 16:20 G	31853564.04	31853564.18	31853564.35	0.0062	0.0026	
Mercury	82500-03-27 17:32 G	31853652.07	31853652.23	31853652.40	0.0062	0.0014	
Mercury	82500-06-23 18:29 G	31853740.11	31853740.27	31853740.44	0.0062	0.0004	
Mercury	82500-09-19 19:27 G	31853828.14	31853828.31	31853828.48	0.0063	0.0007	
Mercury	82500-12-16 20:10 G	31853916.19	31853916.34	31853916.51	0.0063	0.0018	
Moon	82501-01-16 17:17 G	31853947.00	31853947.22	31853947.48	0.0063	0.0021	
Earth	82501-01-16 20:24 G	31853947.12	31853947.35	31853947.60	0.0063	0.0022	*
Mercury	82501-03-14 21:08 G	31854004.24	31854004.38	31854004.54	0.0063	0.0028	
Mercury	82501-06-10 21:51 G	31854092.30	31854092.41	31854092.56	0.0063	0.0039	
Mercury	82501-09-06 23:03 G	31854180.37	31854180.46	31854180.57	0.0063	0.0049	
Mercury	82501-12-03 23:46 G	31854268.46	31854268.49	31854268.56	0.0063	0.0060	
Earth	82502-01-18 05:46 G	31854313.72	31854313.74	31854313.81	0.0063	0.0062	
Moon	82502-01-18 07:56 G	31854313.78	31854313.83	31854313.88	0.0063	0.0062	*
Venus	82508-09-11 11:32 G	31856741.85	31856741.98	31856742.14	0.0065	0.0050	
Venus	82509-04-24 16:05 G	31856966.96	31856967.17	31856967.39	0.0066	0.0011	
Venus	82509-12-05 20:39 G	31857192.17	31857192.36	31857192.57	0.0066	0.0029	
Mercury	82590-05-28 03:08 G	31886585.62	31886585.63	31886585.67	0.0082	0.0081	
Mercury	82590-08-24 04:48 G	31886673.61	31886673.70	31886673.81	0.0082	0.0060	
Mercury	82590-11-20 06:29 G	31886761.64	31886761.77	31886761.90	0.0081	0.0039	
Mercury	82591-02-16 07:56 G	31886849.69	31886849.83	31886849.98	0.0081	0.0018	
Mercury	82591-05-15 09:36 G	31886937.75	31886937.90	31886938.04	0.0081	0.0003	

Moon	82591-07-19 08:24 G	31887002.64	31887002.85	31887003.10	0.0081	0.0043
Earth	82591-07-19 08:10 G	31887002.65	31887002.84	31887003.08	0.0081	0.0047 *
Mercury	82591-08-11 10:48 G	31887025.81	31887025.95	31887026.10	0.0081	0.0023
Mercury	82591-11-07 12:15 G	31887113.89	31887114.01	31887114.14	0.0081	0.0043
Mercury	82592-02-03 13:41 G	31887201.99	31887202.07	31887202.17	0.0081	0.0064
Mars	82595-09-13 07:41 G	31888519.51	31888519.82	31888520.13	0.0079	0.0013
Venus	82596-12-25 02:39 G	31888988.40	31888988.61	31888988.83	0.0078	0.0018
Venus	82597-08-07 12:15 G	31889213.85	31889214.01	31889214.19	0.0078	0.0049
Mercury	82747-08-04 19:56 G	31943996.26	31943996.33	31943996.43	0.0062	0.0053
Mercury	82747-10-31 20:39 G	31944084.26	31944084.36	31944084.51	0.0062	0.0044
Mercury	82748-01-27 21:51 G	31944172.28	31944172.41	31944172.57	0.0062	0.0033
Mercury	82748-04-24 23:03 G	31944260.30	31944260.46	31944260.62	0.0062	0.0022
Mercury	82748-07-22 00:00 G	31944348.34	31944348.50	31944348.67	0.0062	0.0011
Mercury	82748-10-18 00:58 G	31944436.37	31944436.54	31944436.71	0.0062	0.0001
Mercury	82749-01-14 01:56 G	31944524.41	31944524.58	31944524.75	0.0063	0.0010
Earth	82749-01-19 23:46 G	31944530.34	31944530.49	31944530.68	0.0063	0.0047
Moon	82749-01-20 01:41 G	31944530.43	31944530.57	31944530.75	0.0063	0.0050 *
Mercury	82749-04-12 02:39 G	31944612.46	31944612.61	31944612.78	0.0063	0.0021
Mercury	82749-07-09 03:51 G	31944700.51	31944700.66	31944700.81	0.0063	0.0031
Mercury	82749-10-05 04:34 G	31944788.58	31944788.69	31944788.82	0.0063	0.0042
Mercury	82750-01-01 05:17 G	31944876.65	31944876.72	31944876.83	0.0063	0.0053
Earth	82750-01-21 09:36 G	31944896.71	31944896.90	31944897.13	0.0063	0.0036
Moon	82750-01-21 09:51 G	31944896.73	31944896.91	31944897.12	0.0063	0.0039 *
Venus	82757-03-29 17:17 G	31947521.07	31947521.22	31947521.42	0.0065	0.0041
Venus	82757-11-09 22:20 G	31947746.21	31947746.43	31947746.65	0.0066	0.0001
Venus	82758-06-23 02:24 G	31947971.44	31947971.60	31947971.80	0.0066	0.0039
Mercury	82838-09-21 10:34 G	31977281.90	31977281.94	31977282.00	0.0082	0.0077
Mercury	82838-12-18 12:15 G	31977369.90	31977370.01	31977370.12	0.0082	0.0056
Mercury	82839-03-16 13:27 G	31977457.94	31977458.06	31977458.21	0.0081	0.0036
Mercury	82839-06-12 15:08 G	31977545.99	31977546.13	31977546.28	0.0081	0.0015

Mercury	82839-09-08 16:48 G	31977634.05	31977634.20	31977634.34	0.0081	0.0006
Mercury	82839-12-05 18:15 G	31977722.12	31977722.26	31977722.40	0.0081	0.0026
Mercury	82840-03-02 19:27 G	31977810.20	31977810.31	31977810.44	0.0081	0.0047
Mercury	82840-05-29 20:53 G	31977898.30	31977898.37	31977898.46	0.0081	0.0067
Mars	82843-12-23 09:51 G	31979200.63	31979200.91	31979201.22	0.0079	0.0029
Venus	82844-11-29 00:29 G	31979542.41	31979542.52	31979542.64	0.0078	0.0067
Venus	82845-07-12 10:34 G	31979767.72	31979767.94	31979768.16	0.0078	0.0002
Venus	82846-02-22 19:56 G	31979993.25	31979993.33	31979993.45	0.0078	0.0069
Mercury	82995-11-28 01:27 G	32034692.50	32034692.56	32034692.67	0.0062	0.0054
Mercury	82996-02-24 02:53 G	32034780.51	32034780.62	32034780.75	0.0062	0.0043
Mercury	82996-05-22 03:36 G	32034868.52	32034868.65	32034868.81	0.0062	0.0033
Mercury	82996-08-18 04:48 G	32034956.55	32034956.70	32034956.86	0.0062	0.0022
Mercury	82996-11-14 05:46 G	32035044.58	32035044.74	32035044.91	0.0062	0.0012
Mercury	82997-02-10 06:44 G	32035132.61	32035132.78	32035132.95	0.0062	0.0002
Mercury	82997-05-09 07:41 G	32035220.66	32035220.82	32035220.99	0.0062	0.0009
Mercury	82997-08-05 08:39 G	32035308.70	32035308.86	32035309.02	0.0063	0.0020
Mercury	82997-11-01 09:22 G	32035396.75	32035396.89	32035397.05	0.0063	0.0031
Moon	82998-01-23 09:36 G	32035479.64	32035479.90	32035480.16	0.0063	0.0004
Earth	82998-01-23 10:48 G	32035479.70	32035479.95	32035480.21	0.0063	0.0004 *
Mercury	82998-01-28 10:20 G	32035484.81	32035484.93	32035485.07	0.0063	0.0041
Mercury	82998-04-26 11:03 G	32035572.89	32035572.96	32035573.07	0.0063	0.0052
Mercury	82998-07-23 12:29 G	32035661.00	32035661.02	32035661.04	0.0063	0.0062

# 84TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 84th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	83005-10-14 21:36	G	32038300.23	32038300.40	32038300.60	0.0065	0.0036	
Venus	83006-05-28 02:24	G	32038525.38	32038525.60	32038525.82	0.0066	0.0003	
Venus	83007-01-08 06:29	G	32038750.62	32038750.77	32038750.95	0.0066	0.0043	
Mercury	83087-04-13 17:46	G	32068066.17	32068066.24	32068066.35	0.0082	0.0065	
Mercury	83087-07-10 19:27	G	32068154.20	32068154.31	32068154.44	0.0082	0.0044	
Mercury	83087-10-06 20:53	G	32068242.24	32068242.37	32068242.52	0.0081	0.0024	
Mercury	83088-01-02 22:34	G	32068330.29	32068330.44	32068330.59	0.0081	0.0003	
Mercury	83088-03-31 00:00	G	32068418.36	32068418.50	32068418.65	0.0081	0.0018	
Mercury	83088-06-27 01:27	G	32068506.44	32068506.56	32068506.70	0.0081	0.0038	
Earth	83088-07-26 01:12	G	32068535.29	32068535.55	32068535.81	0.0081	0.0001	
Moon	83088-07-26 04:34	G	32068535.43	32068535.69	32068535.95	0.0081	0.0003	*
Mercury	83088-09-23 02:39	G	32068594.53	32068594.61	32068594.73	0.0081	0.0059	
Mercury	83088-12-20 04:20	G	32068682.66	32068682.68	32068682.72	0.0081	0.0079	
Mars	83092-04-02 01:12	G	32069881.23	32069881.55	32069881.87	0.0079	0.0003	
Venus	83093-06-16 04:34	G	32070321.58	32070321.69	32070321.84	0.0078	0.0062	
Venus	83094-01-27 14:53	G	32070546.90	32070547.12	32070547.34	0.0078	0.0006	
Venus	83094-09-10 00:00	G	32070772.46	32070772.50	32070772.59	0.0078	0.0074	
Mercury	83244-03-23 07:27	G	32125388.75	32125388.81	32125388.90	0.0062	0.0055	
Mercury	83244-06-19 08:39	G	32125476.75	32125476.86	32125476.98	0.0062	0.0044	
Mercury	83244-09-15 09:22	G	32125564.76	32125564.89	32125565.04	0.0062	0.0034	
Mercury	83244-12-12 10:34	G	32125652.78	32125652.94	32125653.10	0.0062	0.0024	
Mercury	83245-03-10 11:17	G	32125740.81	32125740.97	32125741.15	0.0062	0.0014	
Mercury	83245-06-06 12:29	G	32125828.85	32125829.02	32125829.19	0.0062	0.0003	
Mercury	83245-09-02 13:27	G	32125916.89	32125917.06	32125917.23	0.0062	0.0008	
Mercury	83245-11-29 14:10	G	32126004.94	32126005.09	32126005.26	0.0063	0.0019	
Earth	83246-01-26 11:46	G	32126062.77	32126062.99	32126063.22	0.0063	0.0030	
Moon	83246-01-26 14:10	G	32126062.90	32126063.09	32126063.32	0.0063	0.0034	*

Mercury	83246-02-25 15:22 G	32126092.99	32126093.14	32126093.29	0.0063	0.0029
Mercury	83246-05-24 16:05 G	32126181.05	32126181.17	32126181.31	0.0063	0.0040
Mercury	83246-08-20 16:48 G	32126269.12	32126269.20	32126269.32	0.0063	0.0051
Mercury	83246-11-16 18:00 G	32126357.22	32126357.25	32126357.30	0.0063	0.0061
Moon	83247-01-27 17:32 G	32126429.14	32126429.23	32126429.38	0.0063	0.0056
Earth	83247-01-27 21:22 G	32126429.26	32126429.39	32126429.54	0.0063	0.0052 *
Venus	83254-05-01 01:56 G	32129079.40	32129079.58	32129079.78	0.0065	0.0033
Venus	83254-12-12 06:29 G	32129304.56	32129304.77	32129304.99	0.0066	0.0007
Venus	83255-07-25 10:34 G	32129529.81	32129529.94	32129530.11	0.0066	0.0047
Mercury	83335-08-08 00:00 G	32158762.44	32158762.50	32158762.59	0.0082	0.0071
Mercury	83335-11-04 01:41 G	32158850.46	32158850.57	32158850.70	0.0082	0.0050
Mercury	83336-01-31 03:08 G	32158938.50	32158938.63	32158938.78	0.0081	0.0030
Mercury	83336-04-28 04:48 G	32159026.55	32159026.70	32159026.85	0.0081	0.0009
Mercury	83336-07-25 06:15 G	32159114.62	32159114.76	32159114.91	0.0081	0.0012
Moon	83336-07-28 11:32 G	32159117.95	32159117.98	32159118.05	0.0081	0.0080
Earth	83336-07-28 15:08 G	32159118.10	32159118.13	32159118.21	0.0081	0.0080
Mercury	83336-10-21 07:41 G	32159202.69	32159202.82	32159202.96	0.0081	0.0032
Mercury	83337-01-17 08:53 G	32159290.77	32159290.87	32159291.00	0.0081	0.0053
Mercury	83337-04-15 10:34 G	32159378.88	32159378.94	32159379.01	0.0081	0.0073
Mars	83340-07-11 16:48 G	32160561.89	32160562.20	32160562.52	0.0079	0.0014
Venus	83342-01-01 09:22 G	32161100.75	32161100.89	32161101.07	0.0078	0.0055
Venus	83342-08-14 19:41 G	32161326.10	32161326.32	32161326.54	0.0078	0.0014
Mercury	83492-07-17 12:29 G	32216084.99	32216085.02	32216085.10	0.0062	0.0059
Mercury	83492-10-13 13:56 G	32216172.98	32216173.08	32216173.19	0.0062	0.0048
Mercury	83493-01-09 14:39 G	32216260.99	32216261.11	32216261.26	0.0062	0.0038
Mercury	83493-04-07 15:51 G	32216349.01	32216349.16	32216349.31	0.0062	0.0028
Mercury	83493-07-04 16:34 G	32216437.04	32216437.19	32216437.36	0.0062	0.0018
Mercury	83493-09-30 17:46 G	32216525.07	32216525.24	32216525.41	0.0062	0.0007
Mercury	83493-12-27 18:44 G	32216613.11	32216613.28	32216613.45	0.0062	0.0004
Mercury	83494-03-25 19:27 G	32216701.15	32216701.31	32216701.48	0.0062	0.0015

Mercury	83494-06-21 20:39 G	32216789.20	32216789.36	32216789.51	0.0062	0.0025
Mercury	83494-09-17 21:22 G	32216877.26	32216877.39	32216877.54	0.0063	0.0036
Mercury	83494-12-14 22:05 G	32216965.33	32216965.42	32216965.55	0.0063	0.0047
Earth	83495-01-30 20:24 G	32217012.10	32217012.35	32217012.60	0.0063	0.0013
Moon	83495-01-31 00:00 G	32217012.25	32217012.50	32217012.75	0.0063	0.0013 *
Mercury	83495-03-12 23:17 G	32217053.41	32217053.47	32217053.55	0.0063	0.0057
Venus	83502-11-17 04:20 G	32219858.51	32219858.68	32219858.89	0.0065	0.0034
Venus	83503-06-30 09:08 G	32220083.66	32220083.88	32220084.10	0.0066	0.0006
Venus	83504-02-10 13:12 G	32220308.91	32220309.05	32220309.22	0.0066	0.0046
Mercury	83584-02-28 06:44 G	32249546.71	32249546.78	32249546.88	0.0082	0.0066
Mercury	83584-05-26 08:24 G	32249634.73	32249634.85	32249634.98	0.0082	0.0045
Mercury	83584-08-22 09:51 G	32249722.78	32249722.91	32249723.06	0.0081	0.0025
Mercury	83584-11-18 11:32 G	32249810.83	32249810.98	32249811.13	0.0081	0.0004
Mercury	83585-02-14 12:44 G	32249898.89	32249899.03	32249899.18	0.0081	0.0017
Mercury	83585-05-13 14:10 G	32249986.97	32249987.09	32249987.23	0.0081	0.0037
Moon	83585-08-02 06:15 G	32250067.52	32250067.76	32250068.02	0.0081	0.0011
Earth	83585-08-02 07:56 G	32250067.58	32250067.83	32250068.10	0.0081	0.0007 *
Mercury	83585-08-09 15:51 G	32250075.06	32250075.16	32250075.26	0.0081	0.0057
Mercury	83585-11-05 17:03 G	32250163.18	32250163.21	32250163.26	0.0081	0.0078
Mars	83588-10-19 22:20 G	32251242.29	32251242.43	32251242.62	0.0079	0.0068
Venus	83590-07-19 11:03 G	32251879.84	32251879.96	32251880.13	0.0078	0.0060
Venus	83591-03-01 21:22 G	32252105.18	32252105.39	32252105.62	0.0078	0.0010
Venus	83591-10-13 06:44 G	32252330.78	32252330.78	32252330.82	0.0078	0.0078
Mercury	83740-11-10 18:29 G	32306781.25	32306781.27	32306781.29	0.0062	0.0061
Mercury	83741-02-06 18:58 G	32306869.22	32306869.29	32306869.41	0.0062	0.0051
Mercury	83741-05-05 20:24 G	32306957.22	32306957.35	32306957.48	0.0062	0.0040
Mercury	83741-08-01 21:08 G	32307045.24	32307045.38	32307045.54	0.0062	0.0030
Mercury	83741-10-28 22:05 G	32307133.27	32307133.42	32307133.59	0.0062	0.0020
Mercury	83742-01-24 23:03 G	32307221.30	32307221.46	32307221.64	0.0062	0.0010
Mercury	83742-04-23 00:15 G	32307309.34	32307309.51	32307309.68	0.0062	0.0001



Mercury	83742-07-20 00:58 G	32307397.38	32307397.54	32307397.71	0.0062	0.0012
Mercury	83742-10-16 01:56 G	32307485.43	32307485.58	32307485.75	0.0062	0.0023
Mercury	83743-01-12 02:39 G	32307573.48	32307573.61	32307573.77	0.0063	0.0034
Moon	83743-02-02 17:32 G	32307595.03	32307595.23	32307595.48	0.0063	0.0027
Earth	83743-02-02 20:24 G	32307595.12	32307595.35	32307595.60	0.0063	0.0023 *
Mercury	83743-04-10 03:36 G	32307661.55	32307661.65	32307661.79	0.0063	0.0044
Mercury	83743-07-07 04:20 G	32307749.63	32307749.68	32307749.79	0.0063	0.0055
Earth	83744-02-04 05:46 G	32307961.68	32307961.74	32307961.85	0.0063	0.0059
Moon	83744-02-04 06:58 G	32307961.77	32307961.79	32307961.85	0.0063	0.0062 *
Venus	83751-06-03 07:56 G	32310637.66	32310637.83	32310638.04	0.0065	0.0032
Venus	83752-01-14 12:29 G	32310862.82	32310863.02	32310863.25	0.0066	0.0009
Venus	83752-08-26 17:03 G	32311088.07	32311088.21	32311088.36	0.0066	0.0048
Mercury	83832-06-23 12:44 G	32340242.99	32340243.03	32340243.10	0.0082	0.0075
Mercury	83832-09-19 14:24 G	32340331.00	32340331.10	32340331.21	0.0082	0.0054
Mercury	83832-12-16 15:51 G	32340419.03	32340419.16	32340419.30	0.0082	0.0033
Mercury	83833-03-14 17:32 G	32340507.08	32340507.23	32340507.37	0.0081	0.0013
Mercury	83833-06-10 18:44 G	32340595.14	32340595.28	32340595.43	0.0081	0.0009
Moon	83833-08-04 19:41 G	32340650.29	32340650.32	32340650.40	0.0081	0.0079
Earth	83833-08-04 20:24 G	32340650.31	32340650.35	32340650.45	0.0081	0.0079 *
Mercury	83833-09-06 20:10 G	32340683.21	32340683.34	32340683.49	0.0081	0.0028
Mercury	83833-12-03 21:51 G	32340771.29	32340771.41	32340771.53	0.0081	0.0048
Mercury	83834-03-01 22:48 G	32340859.39	32340859.45	32340859.55	0.0081	0.0069
Venus	83839-02-03 15:36 G	32342659.00	32342659.15	32342659.31	0.0078	0.0055
Venus	83839-09-17 01:27 G	32342884.34	32342884.56	32342884.78	0.0078	0.0014
Mercury	83989-06-03 00:29 G	32397565.45	32397565.52	32397565.61	0.0062	0.0055
Mercury	83989-08-30 01:12 G	32397653.45	32397653.55	32397653.69	0.0062	0.0045
Mercury	83989-11-26 02:24 G	32397741.47	32397741.60	32397741.75	0.0062	0.0034
Mercury	83990-02-22 03:22 G	32397829.49	32397829.64	32397829.81	0.0062	0.0024
Mercury	83990-05-21 04:34 G	32397917.52	32397917.69	32397917.85	0.0062	0.0013
Mercury	83990-08-17 05:32 G	32398005.56	32398005.73	32398005.90	0.0062	0.0003

Mercury	83990-11-13 06:29 G	32398093.60	32398093.77	32398093.94	0.0062	0.0008
Earth	83991-02-05 19:56 G	32398178.30	32398178.33	32398178.36	0.0062	0.0062
Moon	83991-02-05 20:53 G	32398178.37	32398178.37	32398178.40	0.0062	0.0062
Mercury	83991-02-09 07:12 G	32398181.64	32398181.80	32398181.97	0.0062	0.0018
Mercury	83991-05-08 08:10 G	32398269.70	32398269.84	32398270.00	0.0062	0.0029
Mercury	83991-08-04 08:53 G	32398357.76	32398357.87	32398358.02	0.0063	0.0040
Mercury	83991-10-31 10:05 G	32398445.83	32398445.92	32398446.03	0.0063	0.0050
Mercury	83992-01-27 10:48 G	32398533.93	32398533.95	32398534.01	0.0063	0.0061
Earth	83992-02-07 05:17 G	32398544.48	32398544.72	32398544.97	0.0063	0.0019
Moon	83992-02-07 06:00 G	32398544.53	32398544.75	32398545.00	0.0063	0.0019 *
Venus	83999-12-19 10:34 G	32401416.77	32401416.94	32401417.15	0.0065	0.0033
Venus	84000-07-31 15:22 G	32401641.93	32401642.14	32401642.36	0.0066	0.0008

# 85TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 85th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	84001-03-13 19:12 G	32401867.18	32401867.30	32401867.48	0.0066	0.0048		
Mercury	84081-01-12 19:27 G	32431027.25	32431027.31	32431027.40	0.0082	0.0070		
Mercury	84081-04-10 21:08 G	32431115.27	32431115.38	32431115.50	0.0082	0.0049		
Mercury	84081-07-07 22:34 G	32431203.31	32431203.44	32431203.58	0.0082	0.0028		
Mercury	84081-10-04 00:00 G	32431291.36	32431291.50	32431291.65	0.0081	0.0008		
Mercury	84081-12-31 01:27 G	32431379.42	32431379.56	32431379.71	0.0081	0.0013		

Mercury	84082-03-29 02:53 G	32431467.49	32431467.62	32431467.76	0.0081	0.0033
Mercury	84082-06-25 04:20 G	32431555.58	32431555.68	32431555.80	0.0081	0.0053
Moon	84082-08-08 10:05 G	32431599.66	32431599.92	32431600.19	0.0081	0.0012
Earth	84082-08-08 13:27 G	32431599.80	32431600.06	32431600.33	0.0081	0.0008 *
Mercury	84082-09-21 05:32 G	32431643.69	32431643.73	32431643.81	0.0081	0.0074
Venus	84087-08-20 17:17 G	32433438.09	32433438.22	32433438.38	0.0078	0.0059
Venus	84088-04-02 03:22 G	32433663.42	32433663.64	32433663.86	0.0078	0.0010
Mercury	84237-09-27 05:46 G	32488261.70	32488261.74	32488261.83	0.0062	0.0057
Mercury	84237-12-24 07:12 G	32488349.69	32488349.80	32488349.91	0.0062	0.0046
Mercury	84238-03-22 07:56 G	32488437.70	32488437.83	32488437.98	0.0062	0.0036
Mercury	84238-06-18 09:08 G	32488525.73	32488525.88	32488526.04	0.0062	0.0025
Mercury	84238-09-14 09:51 G	32488613.76	32488613.91	32488614.09	0.0062	0.0016
Mercury	84238-12-11 11:03 G	32488701.79	32488701.96	32488702.13	0.0062	0.0005
Mercury	84239-03-09 12:00 G	32488789.83	32488790.00	32488790.17	0.0062	0.0006
Mercury	84239-06-05 12:58 G	32488877.88	32488878.04	32488878.21	0.0062	0.0016
Mercury	84239-09-01 13:41 G	32488965.93	32488966.07	32488966.24	0.0062	0.0027
Mercury	84239-11-28 14:39 G	32489053.99	32489054.11	32489054.26	0.0062	0.0038
Moon	84240-02-10 03:36 G	32489127.42	32489127.65	32489127.92	0.0063	0.0019
Earth	84240-02-10 05:46 G	32489127.50	32489127.74	32489128.00	0.0063	0.0016 *
Mercury	84240-02-24 15:22 G	32489142.06	32489142.14	32489142.27	0.0063	0.0049
Mercury	84240-05-22 16:34 G	32489230.15	32489230.19	32489230.26	0.0063	0.0059
Venus	84248-07-05 14:53 G	32492195.94	32492196.12	32492196.33	0.0066	0.0029
Venus	84249-02-15 19:27 G	32492421.10	32492421.31	32492421.53	0.0066	0.0012
Venus	84249-09-28 23:32 G	32492646.37	32492646.48	32492646.63	0.0066	0.0052
Mercury	84329-05-10 01:41 G	32521723.53	32521723.57	32521723.64	0.0082	0.0076
Mercury	84329-08-06 03:36 G	32521811.54	32521811.65	32521811.75	0.0082	0.0055
Mercury	84329-11-02 04:48 G	32521899.58	32521899.70	32521899.84	0.0082	0.0035
Mercury	84330-01-29 06:15 G	32521987.62	32521987.76	32521987.91	0.0082	0.0015
Mercury	84330-04-27 07:56 G	32522075.68	32522075.83	32522075.98	0.0081	0.0006
Mercury	84330-07-24 09:22 G	32522163.75	32522163.89	32522164.03	0.0081	0.0027

Earth	84330-08-12 03:36 G	32522182.55	32522182.65	32522182.79	0.0081	0.0072
Moon	84330-08-12 07:12 G	32522182.71	32522182.80	32522182.93	0.0081	0.0074 *
Mercury	84330-10-20 10:34 G	32522251.83	32522251.94	32522252.07	0.0081	0.0047
Mercury	84331-01-16 12:00 G	32522339.93	32522340.00	32522340.09	0.0081	0.0067
Venus	84336-03-07 21:51 G	32524217.27	32524217.41	32524217.60	0.0078	0.0052
Venus	84336-10-19 08:10 G	32524442.63	32524442.84	32524443.06	0.0078	0.0018
Mercury	84486-01-20 11:17 G	32578957.95	32578957.97	32578958.02	0.0062	0.0060
Mercury	84486-04-18 12:00 G	32579045.92	32579046.00	32579046.13	0.0062	0.0050
Mercury	84486-07-15 13:27 G	32579133.93	32579134.06	32579134.20	0.0062	0.0039
Mercury	84486-10-11 14:10 G	32579221.95	32579222.09	32579222.26	0.0062	0.0029
Mercury	84487-01-07 15:22 G	32579309.98	32579310.14	32579310.31	0.0062	0.0018
Mercury	84487-04-05 16:20 G	32579398.01	32579398.18	32579398.35	0.0062	0.0008
Mercury	84487-07-02 17:17 G	32579486.05	32579486.22	32579486.40	0.0062	0.0003
Mercury	84487-09-28 18:15 G	32579574.10	32579574.26	32579574.43	0.0062	0.0013
Mercury	84487-12-25 19:12 G	32579662.15	32579662.30	32579662.46	0.0062	0.0024
Earth	84488-02-12 04:48 G	32579710.61	32579710.70	32579710.87	0.0062	0.0054
Moon	84488-02-12 08:39 G	32579710.74	32579710.86	32579711.01	0.0062	0.0053 *
Mercury	84488-03-22 19:56 G	32579750.20	32579750.33	32579750.49	0.0062	0.0035
Mercury	84488-06-18 21:08 G	32579838.27	32579838.38	32579838.50	0.0062	0.0045
Mercury	84488-09-14 21:51 G	32579926.35	32579926.41	32579926.50	0.0063	0.0056
Moon	84489-02-12 11:32 G	32580076.77	32580076.98	32580077.23	0.0063	0.0027
Earth	84489-02-12 15:08 G	32580076.91	32580077.13	32580077.37	0.0063	0.0028 *
Venus	84497-01-19 18:00 G	32582975.07	32582975.25	32582975.47	0.0066	0.0028
Venus	84497-09-01 22:34 G	32583200.23	32583200.44	32583200.66	0.0066	0.0013
Venus	84498-04-15 02:39 G	32583425.50	32583425.61	32583425.76	0.0066	0.0053
Mercury	84577-11-29 08:53 G	32612507.80	32612507.87	32612507.96	0.0082	0.0068
Mercury	84578-02-25 10:34 G	32612595.82	32612595.94	32612596.06	0.0082	0.0047
Mercury	84578-05-24 12:00 G	32612683.86	32612684.00	32612684.14	0.0082	0.0026
Mercury	84578-08-20 13:27 G	32612771.92	32612772.06	32612772.21	0.0081	0.0006
Mercury	84578-11-16 14:53 G	32612859.98	32612860.12	32612860.27	0.0081	0.0014

Mercury	84579-02-12 16:05 G	32612948.05	32612948.17	32612948.32	0.0081	0.0035
Mercury	84579-05-11 17:32 G	32613036.13	32613036.23	32613036.35	0.0081	0.0055
Mercury	84579-08-07 18:58 G	32613124.25	32613124.29	32613124.35	0.0081	0.0075
Earth	84579-08-15 22:05 G	32613132.18	32613132.42	32613132.69	0.0081	0.0021
Moon	84579-08-16 00:00 G	32613132.26	32613132.50	32613132.78	0.0081	0.0025 *
Venus	84584-09-22 00:58 G	32614996.39	32614996.54	32614996.73	0.0078	0.0051
Venus	84585-05-05 11:03 G	32615221.75	32615221.96	32615222.19	0.0078	0.0019
Mercury	84734-05-17 16:48 G	32669654.20	32669654.20	32669654.26	0.0062	0.0061
Mercury	84734-08-13 18:15 G	32669742.17	32669742.26	32669742.36	0.0062	0.0050
Mercury	84734-11-09 18:58 G	32669830.17	32669830.29	32669830.44	0.0062	0.0040
Mercury	84735-02-05 19:56 G	32669918.19	32669918.33	32669918.50	0.0062	0.0030
Mercury	84735-05-04 21:08 G	32670006.22	32670006.38	32670006.55	0.0062	0.0019
Mercury	84735-07-31 22:05 G	32670094.26	32670094.42	32670094.60	0.0062	0.0009
Mercury	84735-10-27 23:17 G	32670182.29	32670182.47	32670182.64	0.0062	0.0002
Mercury	84736-01-24 00:00 G	32670270.34	32670270.50	32670270.67	0.0062	0.0013
Mercury	84736-04-21 00:44 G	32670358.39	32670358.53	32670358.71	0.0062	0.0024
Mercury	84736-07-18 01:56 G	32670446.44	32670446.58	32670446.73	0.0062	0.0034
Mercury	84736-10-14 02:39 G	32670534.51	32670534.61	32670534.75	0.0062	0.0045
Mercury	84737-01-10 03:51 G	32670622.59	32670622.66	32670622.75	0.0063	0.0055
Earth	84737-02-16 16:34 G	32670659.94	32670660.19	32670660.45	0.0063	0.0005
Moon	84737-02-16 19:41 G	32670660.07	32670660.32	32670660.59	0.0063	0.0009 *
Venus	84744-12-25 18:00 G	32673529.20	32673529.25	32673529.35	0.0065	0.0062
Venus	84745-08-07 22:34 G	32673754.25	32673754.44	32673754.66	0.0066	0.0022
Venus	84746-03-21 02:53 G	32673979.43	32673979.62	32673979.85	0.0066	0.0019
Venus	84746-11-01 07:27 G	32674204.73	32674204.81	32674204.92	0.0066	0.0059
Mercury	84826-03-25 15:22 G	32703204.09	32703204.14	32703204.22	0.0082	0.0072
Mercury	84826-06-21 17:03 G	32703292.10	32703292.21	32703292.33	0.0082	0.0051
Mercury	84826-09-17 18:29 G	32703380.14	32703380.27	32703380.41	0.0082	0.0031
Mercury	84826-12-14 19:56 G	32703468.19	32703468.33	32703468.48	0.0082	0.0010
Mercury	84827-03-12 21:22 G	32703556.25	32703556.39	32703556.54	0.0081	0.0011

Mercury	84827-06-08 22:48 G	32703644.32	32703644.45	32703644.59	0.0081	0.0031
Earth	84827-08-18 13:56 G	32703714.90	32703715.08	32703715.30	0.0081	0.0054
Moon	84827-08-18 14:10 G	32703714.91	32703715.09	32703715.28	0.0081	0.0055 *
Mercury	84827-09-05 00:00 G	32703732.40	32703732.50	32703732.63	0.0081	0.0052
Mercury	84827-12-02 01:27 G	32703820.51	32703820.56	32703820.64	0.0081	0.0072
Venus	84833-04-09 06:44 G	32705775.60	32705775.78	32705775.99	0.0078	0.0039
Venus	84833-11-20 16:48 G	32706001.00	32706001.20	32706001.41	0.0078	0.0030
Mercury	84982-12-06 23:46 G	32760438.40	32760438.49	32760438.58	0.0062	0.0053
Mercury	84983-03-05 00:29 G	32760526.41	32760526.52	32760526.65	0.0062	0.0043
Mercury	84983-06-01 01:12 G	32760614.42	32760614.55	32760614.72	0.0062	0.0033
Mercury	84983-08-28 02:24 G	32760702.45	32760702.60	32760702.77	0.0062	0.0022
Mercury	84983-11-24 03:22 G	32760790.48	32760790.64	32760790.82	0.0062	0.0012
Mercury	84984-02-20 04:34 G	32760878.52	32760878.69	32760878.86	0.0062	0.0001
Mercury	84984-05-18 05:32 G	32760966.56	32760966.73	32760966.90	0.0062	0.0009
Mercury	84984-08-14 06:15 G	32761054.61	32761054.76	32761054.93	0.0062	0.0020
Mercury	84984-11-10 07:12 G	32761142.66	32761142.80	32761142.96	0.0062	0.0031
Mercury	84985-02-06 08:10 G	32761230.73	32761230.84	32761230.98	0.0062	0.0041
Moon	84985-02-18 14:24 G	32761242.94	32761243.10	32761243.31	0.0062	0.0042
Earth	84985-02-18 16:05 G	32761243.01	32761243.17	32761243.38	0.0062	0.0043 *
Mercury	84985-05-05 09:08 G	32761318.80	32761318.88	32761318.99	0.0062	0.0052
Mercury	84985-08-01 10:20 G	32761406.93	32761406.93	32761406.94	0.0063	0.0062
Earth	84986-02-20 01:41 G	32761609.39	32761609.57	32761609.80	0.0063	0.0039
Moon	84986-02-20 02:24 G	32761609.39	32761609.60	32761609.81	0.0063	0.0037 *
Venus	84993-07-11 21:36 G	32764308.33	32764308.40	32764308.51	0.0065	0.0060
Venus	84994-02-22 02:10 G	32764533.39	32764533.59	32764533.81	0.0066	0.0020
Venus	84994-10-05 06:29 G	32764758.57	32764758.77	32764758.99	0.0066	0.0021
Venus	84995-05-18 10:48 G	32764983.89	32764983.95	32764984.05	0.0066	0.0061

# 86TH MILLENNIUM CE

**This is a list of transits visible from Pluto in the 86th millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	85074-07-19 21:36	G	32793900.40	32793900.40	32793900.40	0.0082	0.0082	
Mercury	85074-10-15 23:03	G	32793988.37	32793988.46	32793988.56	0.0082	0.0061	
Mercury	85075-01-12 00:15	G	32794076.39	32794076.51	32794076.65	0.0082	0.0041	
Mercury	85075-04-10 01:41	G	32794164.44	32794164.57	32794164.72	0.0082	0.0021	
Mercury	85075-07-07 03:22	G	32794252.49	32794252.64	32794252.79	0.0082	0.0000	
Mercury	85075-10-03 04:48	G	32794340.56	32794340.70	32794340.84	0.0081	0.0020	
Mercury	85075-12-30 06:15	G	32794428.63	32794428.76	32794428.89	0.0081	0.0041	
Mercury	85076-03-27 07:12	G	32794516.72	32794516.80	32794516.91	0.0081	0.0062	
Mercury	85076-06-23 09:08	G	32794604.88	32794604.88	32794604.88	0.0081	0.0081	
Earth	85076-08-22 09:36	G	32794664.69	32794664.90	32794665.14	0.0081	0.0042	
Moon	85076-08-22 12:44	G	32794664.83	32794665.03	32794665.26	0.0081	0.0045	*
Venus	85081-10-25 10:20	G	32796554.74	32796554.93	32796555.14	0.0078	0.0035	
Venus	85082-06-07 20:24	G	32796780.16	32796780.35	32796780.56	0.0078	0.0034	
Mercury	85231-04-02 05:32	G	32851134.65	32851134.73	32851134.82	0.0062	0.0053	
Mercury	85231-06-29 06:15	G	32851222.65	32851222.76	32851222.90	0.0062	0.0043	
Mercury	85231-09-25 07:12	G	32851310.67	32851310.80	32851310.96	0.0062	0.0033	
Mercury	85231-12-22 08:24	G	32851398.70	32851398.85	32851399.02	0.0062	0.0022	
Mercury	85232-03-19 09:22	G	32851486.73	32851486.89	32851487.07	0.0062	0.0012	
Mercury	85232-06-15 10:34	G	32851574.76	32851574.94	32851575.11	0.0062	0.0002	
Mercury	85232-09-11 11:32	G	32851662.81	32851662.98	32851663.15	0.0062	0.0009	
Mercury	85232-12-08 12:15	G	32851750.86	32851751.01	32851751.18	0.0062	0.0020	
Mercury	85233-03-06 13:12	G	32851838.91	32851839.05	32851839.21	0.0062	0.0031	

Mercury	85233-06-02 13:56 G	32851926.97	32851927.08	32851927.23	0.0062	0.0042
Mercury	85233-08-29 15:08 G	32852015.05	32852015.13	32852015.23	0.0062	0.0052
Mercury	85233-11-25 16:05 G	32852103.17	32852103.17	32852103.19	0.0063	0.0062
Earth	85234-02-23 04:05 G	32852192.42	32852192.67	32852192.93	0.0063	0.0006
Moon	85234-02-23 05:32 G	32852192.49	32852192.73	32852192.99	0.0063	0.0004 *
Venus	85242-01-27 02:24 G	32855087.49	32855087.60	32855087.74	0.0065	0.0053
Venus	85242-09-09 06:58 G	32855312.58	32855312.79	32855313.01	0.0066	0.0013
Venus	85243-04-22 11:03 G	32855537.78	32855537.96	32855538.18	0.0066	0.0028
Mercury	85323-02-09 05:17 G	32884684.65	32884684.72	32884684.83	0.0082	0.0065
Mercury	85323-05-08 06:58 G	32884772.68	32884772.79	32884772.92	0.0082	0.0044
Mercury	85323-08-04 08:24 G	32884860.72	32884860.85	32884861.00	0.0082	0.0024
Mercury	85323-10-31 10:05 G	32884948.77	32884948.92	32884949.06	0.0082	0.0004
Mercury	85324-01-27 11:17 G	32885036.83	32885036.97	32885037.12	0.0081	0.0017
Mercury	85324-04-24 12:44 G	32885124.91	32885125.03	32885125.16	0.0081	0.0037
Mercury	85324-07-21 14:10 G	32885212.99	32885213.09	32885213.20	0.0081	0.0058
Moon	85324-08-24 22:48 G	32885247.22	32885247.45	32885247.71	0.0081	0.0033
Earth	85324-08-25 02:24 G	32885247.37	32885247.60	32885247.85	0.0081	0.0031 *
Mercury	85324-10-17 15:22 G	32885301.12	32885301.14	32885301.19	0.0081	0.0078
Venus	85330-05-12 16:34 G	32887333.98	32887334.19	32887334.40	0.0078	0.0022
Venus	85330-12-24 01:56 G	32887559.42	32887559.58	32887559.78	0.0078	0.0047
Mercury	85479-07-27 10:48 G	32941830.89	32941830.95	32941831.03	0.0062	0.0056
Mercury	85479-10-23 11:32 G	32941918.88	32941918.98	32941919.12	0.0062	0.0046
Mercury	85480-01-19 12:44 G	32942006.90	32942007.03	32942007.18	0.0062	0.0035
Mercury	85480-04-16 13:41 G	32942094.92	32942095.07	32942095.24	0.0062	0.0025
Mercury	85480-07-13 14:53 G	32942182.95	32942183.12	32942183.29	0.0062	0.0014
Mercury	85480-10-09 15:51 G	32942270.99	32942271.16	32942271.34	0.0062	0.0004
Mercury	85481-01-05 16:48 G	32942359.03	32942359.20	32942359.38	0.0062	0.0007
Mercury	85481-04-03 17:46 G	32942447.08	32942447.24	32942447.41	0.0062	0.0017
Mercury	85481-06-30 18:29 G	32942535.13	32942535.27	32942535.44	0.0062	0.0028
Mercury	85481-09-26 19:27 G	32942623.19	32942623.31	32942623.46	0.0062	0.0039



Mercury	85481-12-23 20:10 G	32942711.26	32942711.34	32942711.47	0.0062	0.0050
Moon	85482-02-26 01:27 G	32942775.33	32942775.56	32942775.80	0.0062	0.0029
Earth	85482-02-26 03:51 G	32942775.46	32942775.66	32942775.90	0.0062	0.0031 *
Mercury	85482-03-21 21:22 G	32942799.36	32942799.39	32942799.46	0.0062	0.0060
Earth	85483-02-27 13:41 G	32943141.93	32943142.07	32943142.23	0.0063	0.0050
Moon	85483-02-27 16:48 G	32943142.06	32943142.20	32943142.38	0.0063	0.0049 *
Venus	85490-08-14 06:15 G	32945866.63	32945866.76	32945866.91	0.0065	0.0050
Venus	85491-03-27 10:48 G	32946091.73	32946091.95	32946092.16	0.0066	0.0010
Venus	85491-11-07 14:39 G	32946316.94	32946317.11	32946317.32	0.0066	0.0031
Mercury	85571-06-05 11:46 G	32975380.93	32975380.99	32975381.06	0.0082	0.0073
Mercury	85571-09-01 12:58 G	32975468.94	32975469.04	32975469.16	0.0082	0.0053
Mercury	85571-11-28 14:24 G	32975556.98	32975557.10	32975557.25	0.0082	0.0033
Mercury	85572-02-24 16:05 G	32975645.03	32975645.17	32975645.32	0.0082	0.0012
Mercury	85572-05-22 17:32 G	32975733.08	32975733.23	32975733.38	0.0082	0.0008
Mercury	85572-08-18 18:44 G	32975821.15	32975821.28	32975821.42	0.0081	0.0029
Mercury	85572-11-14 20:24 G	32975909.23	32975909.35	32975909.46	0.0081	0.0049
Mercury	85573-02-10 21:22 G	32975997.33	32975997.39	32975997.48	0.0081	0.0069
Moon	85573-08-29 19:56 G	32976197.23	32976197.33	32976197.49	0.0081	0.0070
Earth	85573-08-29 22:20 G	32976197.31	32976197.43	32976197.61	0.0081	0.0067 *
Venus	85578-11-27 20:24 G	32978113.14	32978113.35	32978113.57	0.0078	0.0016
Venus	85579-07-11 06:15 G	32978338.61	32978338.76	32978338.93	0.0078	0.0053
Mercury	85727-11-20 16:48 G	33032527.13	33032527.20	33032527.29	0.0062	0.0055
Mercury	85728-02-16 17:32 G	33032615.13	33032615.23	33032615.37	0.0062	0.0045
Mercury	85728-05-14 18:58 G	33032703.15	33032703.29	33032703.44	0.0062	0.0034
Mercury	85728-08-10 19:41 G	33032791.17	33032791.32	33032791.49	0.0062	0.0024
Mercury	85728-11-06 20:53 G	33032879.21	33032879.37	33032879.54	0.0062	0.0013
Mercury	85729-02-02 21:51 G	33032967.24	33032967.41	33032967.59	0.0062	0.0003
Mercury	85729-05-01 22:48 G	33033055.29	33033055.45	33033055.63	0.0062	0.0008
Mercury	85729-07-28 23:46 G	33033143.33	33033143.49	33033143.66	0.0062	0.0018
Mercury	85729-10-25 00:29 G	33033231.39	33033231.52	33033231.69	0.0062	0.0030

Mercury	85730-01-21 01:41 G	33033319.45	33033319.57	33033319.71	0.0062	0.0040
Earth	85730-03-01 06:00 G	33033358.72	33033358.75	33033358.86	0.0062	0.0061
Moon	85730-03-01 09:51 G	33033358.83	33033358.91	33033359.04	0.0062	0.0057 *
Mercury	85730-04-19 02:24 G	33033407.52	33033407.60	33033407.72	0.0062	0.0051
Mercury	85730-07-16 03:36 G	33033495.62	33033495.65	33033495.70	0.0062	0.0061
Moon	85731-03-02 12:58 G	33033724.81	33033725.04	33033725.30	0.0063	0.0017
Earth	85731-03-02 16:20 G	33033724.95	33033725.18	33033725.43	0.0063	0.0020 *
Jupiter	85737-11-28 18:29 G	33036187.73	33036188.27	33036188.81	0.0065	0.0001
Venus	85739-03-01 11:03 G	33036645.81	33036645.96	33036646.15	0.0065	0.0042
Venus	85739-10-12 15:51 G	33036870.94	33036871.16	33036871.38	0.0066	0.0001
Venus	85740-05-24 19:41 G	33037096.17	33037096.32	33037096.52	0.0066	0.0040
Mercury	85819-09-29 18:29 G	33066077.22	33066077.27	33066077.33	0.0082	0.0076
Mercury	85819-12-26 19:56 G	33066165.23	33066165.33	33066165.44	0.0082	0.0055
Mercury	85820-03-23 21:22 G	33066253.26	33066253.39	33066253.53	0.0082	0.0035
Mercury	85820-06-19 22:48 G	33066341.31	33066341.45	33066341.60	0.0082	0.0014
Mercury	85820-09-16 00:15 G	33066429.37	33066429.51	33066429.66	0.0082	0.0006
Mercury	85820-12-13 01:41 G	33066517.43	33066517.57	33066517.71	0.0081	0.0026
Mercury	85821-03-11 03:08 G	33066605.51	33066605.63	33066605.75	0.0081	0.0047
Mercury	85821-06-07 04:34 G	33066693.61	33066693.69	33066693.77	0.0081	0.0067
Earth	85821-09-01 16:20 G	33066779.91	33066780.18	33066780.44	0.0081	0.0003
Moon	85821-09-01 17:46 G	33066779.97	33066780.24	33066780.51	0.0081	0.0006 *
Venus	85826-11-01 16:20 G	33068667.11	33068667.18	33068667.29	0.0078	0.0072
Venus	85827-06-15 02:53 G	33068892.40	33068892.62	33068892.85	0.0078	0.0002
Venus	85828-01-26 12:15 G	33069117.93	33069118.01	33069118.14	0.0078	0.0068
Mercury	85976-03-15 22:20 G	33123223.37	33123223.43	33123223.51	0.0062	0.0056
Mercury	85976-06-11 23:17 G	33123311.37	33123311.47	33123311.60	0.0062	0.0046
Mercury	85976-09-08 00:29 G	33123399.38	33123399.52	33123399.67	0.0062	0.0035
Mercury	85976-12-05 01:27 G	33123487.41	33123487.56	33123487.73	0.0062	0.0025
Mercury	85977-03-03 02:39 G	33123575.44	33123575.61	33123575.78	0.0062	0.0014
Mercury	85977-05-30 03:36 G	33123663.48	33123663.65	33123663.82	0.0062	0.0004

Mercury	85977-08-26 04:34 G	33123751.52	33123751.69	33123751.86	0.0062	0.0007
Mercury	85977-11-22 05:32 G	33123839.57	33123839.73	33123839.90	0.0062	0.0017
Mercury	85978-02-18 06:15 G	33123927.62	33123927.76	33123927.93	0.0062	0.0028
Mercury	85978-05-17 07:12 G	33124015.68	33124015.80	33124015.95	0.0062	0.0039
Mercury	85978-08-13 08:10 G	33124103.75	33124103.84	33124103.96	0.0062	0.0049
Mercury	85978-11-09 09:22 G	33124191.85	33124191.89	33124191.95	0.0062	0.0060
Earth	85979-03-05 17:17 G	33124307.99	33124308.22	33124308.48	0.0063	0.0014
Moon	85979-03-05 20:10 G	33124308.10	33124308.34	33124308.61	0.0063	0.0014 *
Venus	85987-09-16 15:36 G	33127424.98	33127425.15	33127425.34	0.0065	0.0036
Venus	85988-04-28 19:56 G	33127650.12	33127650.33	33127650.56	0.0066	0.0005
Venus	85988-12-10 00:29 G	33127875.37	33127875.52	33127875.69	0.0066	0.0045

# 87TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 87th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	86068-01-23 00:44 G	33156773.53	33156773.53	33156773.57	0.0082	0.0081		
Mercury	86068-04-20 02:24 G	33156861.51	33156861.60	33156861.71	0.0082	0.0060		
Mercury	86068-07-17 03:51 G	33156949.54	33156949.66	33156949.79	0.0082	0.0040		
Mercury	86068-10-13 05:17 G	33157037.59	33157037.72	33157037.87	0.0082	0.0020		
Mercury	86069-01-09 06:44 G	33157125.64	33157125.78	33157125.93	0.0082	0.0003		
Mercury	86069-04-07 08:10 G	33157213.70	33157213.84	33157213.98	0.0082	0.0021		
Mercury	86069-07-04 09:22 G	33157301.78	33157301.89	33157302.03	0.0081	0.0042		

Earth	86069-09-03 06:58 G	33157362.78	33157362.79	33157362.86	0.0081	0.0081
Mercury	86069-09-30 10:48 G	33157389.87	33157389.95	33157390.05	0.0081	0.0062
Venus	86075-05-18 21:36 G	33159446.28	33159446.40	33159446.57	0.0078	0.0060
Venus	86075-12-30 08:10 G	33159671.62	33159671.84	33159672.06	0.0078	0.0010
Mercury	86224-07-10 04:34 G	33213919.62	33213919.69	33213919.80	0.0062	0.0053
Mercury	86224-10-06 06:00 G	33214007.62	33214007.75	33214007.88	0.0062	0.0042
Mercury	86225-01-02 06:44 G	33214095.64	33214095.78	33214095.94	0.0062	0.0032
Mercury	86225-03-31 07:41 G	33214183.67	33214183.82	33214184.00	0.0062	0.0022
Mercury	86225-06-27 08:53 G	33214271.70	33214271.87	33214272.05	0.0062	0.0011
Mercury	86225-09-23 10:05 G	33214359.74	33214359.92	33214360.09	0.0062	0.0001
Mercury	86225-12-20 11:03 G	33214447.79	33214447.96	33214448.13	0.0062	0.0010
Mercury	86226-03-18 11:46 G	33214535.84	33214535.99	33214536.17	0.0062	0.0021
Mercury	86226-06-14 12:44 G	33214623.89	33214624.03	33214624.19	0.0062	0.0032
Mercury	86226-09-10 13:41 G	33214711.96	33214712.07	33214712.21	0.0062	0.0042
Mercury	86226-12-07 14:53 G	33214800.04	33214800.12	33214800.22	0.0062	0.0053
Moon	86227-03-08 19:56 G	33214891.15	33214891.33	33214891.55	0.0062	0.0037
Earth	86227-03-08 21:22 G	33214891.21	33214891.39	33214891.61	0.0062	0.0040 *
Moon	86228-03-09 06:15 G	33215257.57	33215257.76	33215258.00	0.0063	0.0038
Earth	86228-03-09 06:44 G	33215257.62	33215257.78	33215258.01	0.0063	0.0041 *
Venus	86235-08-21 17:03 G	33217979.19	33217979.21	33217979.30	0.0065	0.0064
Venus	86236-04-02 22:05 G	33218204.22	33218204.42	33218204.63	0.0066	0.0023
Venus	86236-11-14 02:10 G	33218429.39	33218429.59	33218429.81	0.0066	0.0018
Venus	86237-06-27 06:15 G	33218654.69	33218654.76	33218654.89	0.0066	0.0059
Mercury	86316-05-19 08:10 G	33247469.81	33247469.84	33247469.89	0.0082	0.0079
Mercury	86316-08-15 09:36 G	33247557.81	33247557.90	33247558.01	0.0082	0.0058
Mercury	86316-11-11 11:17 G	33247645.84	33247645.97	33247646.10	0.0082	0.0037
Mercury	86317-02-07 12:44 G	33247733.89	33247734.03	33247734.17	0.0082	0.0017
Mercury	86317-05-06 14:10 G	33247821.94	33247822.09	33247822.23	0.0082	0.0003
Mercury	86317-08-02 15:22 G	33247910.01	33247910.14	33247910.29	0.0082	0.0024
Mercury	86317-10-29 16:48 G	33247998.08	33247998.20	33247998.33	0.0081	0.0044

Mercury	86318-01-25 18:15 G	33248086.17	33248086.26	33248086.35	0.0081	0.0064
Earth	86318-09-09 10:05 G	33248312.72	33248312.92	33248313.17	0.0081	0.0041
Moon	86318-09-09 13:56 G	33248312.85	33248313.08	33248313.31	0.0081	0.0037 *
Venus	86323-12-05 05:32 G	33250225.55	33250225.73	33250225.94	0.0078	0.0038
Venus	86324-07-17 15:36 G	33250450.96	33250451.15	33250451.37	0.0078	0.0032
Mercury	86472-08-06 09:36 G	33304527.89	33304527.90	33304527.96	0.0062	0.0061
Mercury	86472-11-02 11:03 G	33304615.87	33304615.96	33304616.07	0.0062	0.0050
Mercury	86473-01-29 11:46 G	33304703.88	33304703.99	33304704.14	0.0062	0.0040
Mercury	86473-04-27 13:12 G	33304791.90	33304792.05	33304792.21	0.0062	0.0029
Mercury	86473-07-24 13:56 G	33304879.93	33304880.08	33304880.26	0.0062	0.0019
Mercury	86473-10-20 15:08 G	33304967.96	33304968.13	33304968.31	0.0062	0.0008
Mercury	86474-01-16 16:20 G	33305056.00	33305056.18	33305056.35	0.0062	0.0003
Mercury	86474-04-14 17:03 G	33305144.05	33305144.21	33305144.39	0.0062	0.0013
Mercury	86474-07-11 18:15 G	33305232.10	33305232.26	33305232.42	0.0062	0.0024
Mercury	86474-10-07 18:58 G	33305320.16	33305320.29	33305320.45	0.0062	0.0034
Mercury	86475-01-03 20:24 G	33305408.23	33305408.35	33305408.47	0.0062	0.0045
Mercury	86475-04-01 20:53 G	33305496.31	33305496.37	33305496.47	0.0062	0.0056
Earth	86476-03-11 10:34 G	33305840.71	33305840.94	33305841.21	0.0063	0.0014
Moon	86476-03-11 12:15 G	33305840.78	33305841.01	33305841.26	0.0063	0.0015 *
Venus	86484-03-06 23:03 G	33308758.35	33308758.46	33308758.62	0.0065	0.0052
Venus	86484-10-18 03:51 G	33308983.45	33308983.66	33308983.88	0.0066	0.0011
Venus	86485-05-31 07:56 G	33309208.65	33309208.83	33309209.04	0.0066	0.0030
Mercury	86564-09-11 15:36 G	33338166.11	33338166.15	33338166.21	0.0082	0.0076
Mercury	86564-12-08 17:03 G	33338254.11	33338254.21	33338254.32	0.0082	0.0055
Mercury	86565-03-06 18:29 G	33338342.15	33338342.27	33338342.41	0.0082	0.0035
Mercury	86565-06-02 20:10 G	33338430.19	33338430.34	33338430.48	0.0082	0.0014
Mercury	86565-08-29 21:22 G	33338518.25	33338518.39	33338518.54	0.0082	0.0007
Mercury	86565-11-25 22:48 G	33338606.32	33338606.45	33338606.59	0.0082	0.0026
Mercury	86566-02-22 00:00 G	33338694.39	33338694.50	33338694.63	0.0081	0.0047
Mercury	86566-05-21 01:27 G	33338782.49	33338782.56	33338782.65	0.0081	0.0067

Moon	86566-09-11 03:22 G	33338895.39	33338895.64	33338895.90	0.0081	0.0022
Earth	86566-09-11 06:44 G	33338895.54	33338895.78	33338896.05	0.0081	0.0019 *
Venus	86572-06-20 13:56 G	33341004.86	33341005.08	33341005.30	0.0078	0.0015
Venus	86573-01-31 23:17 G	33341230.34	33341230.47	33341230.65	0.0078	0.0055
Mercury	86720-12-01 17:17 G	33395224.13	33395224.22	33395224.32	0.0062	0.0052
Mercury	86721-02-27 18:00 G	33395312.14	33395312.25	33395312.39	0.0062	0.0042
Mercury	86721-05-26 19:27 G	33395400.16	33395400.31	33395400.46	0.0062	0.0031
Mercury	86721-08-22 20:10 G	33395488.19	33395488.34	33395488.51	0.0062	0.0021
Mercury	86721-11-18 21:08 G	33395576.22	33395576.38	33395576.56	0.0062	0.0011
Mercury	86722-02-14 22:20 G	33395664.26	33395664.43	33395664.61	0.0062	0.0002
Mercury	86722-05-13 23:17 G	33395752.31	33395752.47	33395752.65	0.0062	0.0011
Mercury	86722-08-10 00:15 G	33395840.36	33395840.51	33395840.68	0.0062	0.0022
Mercury	86722-11-06 01:12 G	33395928.41	33395928.55	33395928.71	0.0062	0.0032
Mercury	86723-02-02 02:24 G	33396016.48	33396016.60	33396016.73	0.0062	0.0042
Mercury	86723-05-01 03:08 G	33396104.56	33396104.63	33396104.74	0.0062	0.0053
Moon	86724-03-15 15:08 G	33396423.87	33396424.13	33396424.39	0.0063	0.0001
Earth	86724-03-15 18:15 G	33396424.01	33396424.26	33396424.52	0.0063	0.0004 *
Venus	86732-09-23 07:56 G	33399537.65	33399537.83	33399538.03	0.0066	0.0031
Venus	86733-05-06 12:15 G	33399762.80	33399763.01	33399763.24	0.0066	0.0010
Venus	86733-12-17 16:34 G	33399988.07	33399988.19	33399988.35	0.0066	0.0051
Mercury	86813-01-05 23:46 G	33428862.42	33428862.49	33428862.59	0.0082	0.0064
Mercury	86813-04-04 01:27 G	33428950.44	33428950.56	33428950.69	0.0082	0.0044
Mercury	86813-07-01 02:53 G	33429038.48	33429038.62	33429038.76	0.0082	0.0023
Mercury	86813-09-27 04:20 G	33429126.53	33429126.68	33429126.82	0.0082	0.0003
Mercury	86813-12-24 05:32 G	33429214.60	33429214.73	33429214.88	0.0082	0.0018
Mercury	86814-03-22 06:58 G	33429302.67	33429302.79	33429302.93	0.0082	0.0038
Mercury	86814-06-18 08:24 G	33429390.75	33429390.85	33429390.96	0.0081	0.0058
Earth	86814-09-14 07:12 G	33429478.65	33429478.80	33429479.00	0.0081	0.0060
Moon	86814-09-14 10:48 G	33429478.79	33429478.95	33429479.16	0.0081	0.0058 *
Mercury	86814-09-14 09:51 G	33429478.87	33429478.91	33429478.95	0.0081	0.0078 *

Venus	86820-05-25 14:10 G	33431558.94	33431559.09	33431559.27	0.0078	0.0052
Venus	86821-01-06 00:29 G	33431784.30	33431784.52	33431784.74	0.0078	0.0019
Mercury	86968-12-28 23:17 G	33485832.40	33485832.47	33485832.57	0.0062	0.0054
Mercury	86969-03-27 00:29 G	33485920.41	33485920.52	33485920.66	0.0062	0.0043
Mercury	86969-06-23 01:27 G	33486008.43	33486008.56	33486008.72	0.0062	0.0033
Mercury	86969-09-19 02:39 G	33486096.45	33486096.61	33486096.78	0.0062	0.0022
Mercury	86969-12-16 03:36 G	33486184.49	33486184.65	33486184.83	0.0062	0.0012
Mercury	86970-03-14 04:48 G	33486272.52	33486272.70	33486272.87	0.0062	0.0001
Mercury	86970-06-10 05:32 G	33486360.57	33486360.73	33486360.91	0.0062	0.0010
Mercury	86970-09-06 06:44 G	33486448.62	33486448.78	33486448.95	0.0062	0.0020
Mercury	86970-12-03 07:56 G	33486536.68	33486536.83	33486536.98	0.0062	0.0031
Mercury	86971-03-01 08:39 G	33486624.74	33486624.86	33486625.00	0.0062	0.0041
Mercury	86971-05-28 09:22 G	33486712.82	33486712.89	33486713.01	0.0062	0.0052
Earth	86972-03-18 01:41 G	33487007.33	33487007.57	33487007.82	0.0062	0.0019
Moon	86972-03-18 04:34 G	33487007.47	33487007.69	33487007.95	0.0062	0.0020 *
Moon	86973-03-19 07:41 G	33487373.82	33487373.82	33487373.87	0.0063	0.0063
Earth	86973-03-19 10:48 G	33487373.92	33487373.95	33487374.05	0.0063	0.0061
Venus	86980-08-27 12:29 G	33490091.88	33490092.02	33490092.17	0.0065	0.0049
Venus	86981-04-09 16:48 G	33490316.99	33490317.20	33490317.42	0.0066	0.0009
Venus	86981-11-20 21:08 G	33490542.20	33490542.38	33490542.57	0.0066	0.0032

# 88TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 88th millennium CE.

PLANET	MAX- TRANSIT	C	START	MAX	END	SUNRAD	DEPTH	S
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TIME

Mercury	87061-02-03 07:12 G	33519470.73	33519470.80	33519470.89	0.0082	0.0069
Mercury	87061-05-02 08:39 G	33519558.75	33519558.86	33519558.99	0.0082	0.0048
Mercury	87061-07-29 10:20 G	33519646.79	33519646.93	33519647.06	0.0082	0.0027
Mercury	87061-10-25 11:32 G	33519734.84	33519734.98	33519735.13	0.0082	0.0008
Mercury	87062-01-21 12:58 G	33519822.90	33519823.04	33519823.19	0.0082	0.0013
Mercury	87062-04-19 14:10 G	33519910.97	33519911.09	33519911.23	0.0082	0.0034
Mercury	87062-07-16 15:36 G	33519999.05	33519999.15	33519999.27	0.0082	0.0054
Mercury	87062-10-12 17:03 G	33520087.16	33520087.21	33520087.28	0.0081	0.0074
Venus	87068-12-11 02:53 G	33522338.40	33522338.62	33522338.85	0.0078	0.0010
Venus	87069-07-24 12:44 G	33522563.90	33522564.03	33522564.18	0.0078	0.0060
Mercury	87216-10-30 05:17 G	33576352.70	33576352.72	33576352.79	0.0061	0.0060
Mercury	87217-01-26 06:44 G	33576440.69	33576440.78	33576440.90	0.0062	0.0049
Mercury	87217-04-24 07:41 G	33576528.70	33576528.82	33576528.97	0.0062	0.0039
Mercury	87217-07-21 08:53 G	33576616.72	33576616.87	33576617.03	0.0062	0.0028
Mercury	87217-10-17 09:51 G	33576704.75	33576704.91	33576705.09	0.0062	0.0018
Mercury	87218-01-13 11:03 G	33576792.79	33576792.96	33576793.14	0.0062	0.0007
Mercury	87218-04-11 12:00 G	33576880.83	33576881.00	33576881.18	0.0062	0.0004
Mercury	87218-07-08 12:58 G	33576968.88	33576969.04	33576969.22	0.0062	0.0014
Mercury	87218-10-04 13:41 G	33577056.93	33577057.07	33577057.25	0.0062	0.0025
Mercury	87218-12-31 14:53 G	33577144.99	33577145.12	33577145.27	0.0062	0.0035
Mercury	87219-03-29 15:36 G	33577233.06	33577233.15	33577233.29	0.0062	0.0047
Mercury	87219-06-25 17:03 G	33577321.15	33577321.21	33577321.29	0.0062	0.0057
Moon	87220-03-21 09:22 G	33577590.68	33577590.89	33577591.14	0.0062	0.0027
Earth	87220-03-21 12:44 G	33577590.82	33577591.03	33577591.29	0.0062	0.0024 *
Earth	87221-03-22 22:34 G	33577957.35	33577957.44	33577957.58	0.0063	0.0056
Moon	87221-03-23 01:27 G	33577957.49	33577957.56	33577957.67	0.0063	0.0059 *
Mars	87223-06-29 20:10 G	33578786.13	33578786.34	33578786.60	0.0064	0.0040
Venus	87228-08-01 19:12 G	33580646.23	33580646.30	33580646.43	0.0065	0.0058



Venus	87229-03-14 23:46 G	33580871.29	33580871.49	33580871.71	0.0066	0.0018
Venus	87229-10-26 04:20 G	33581096.48	33581096.68	33581096.89	0.0066	0.0023
Venus	87230-06-08 08:10 G	33581321.83	33581321.84	33581321.91	0.0066	0.0065
Mercury	87309-03-03 15:51 G	33610079.07	33610079.16	33610079.25	0.0082	0.0064
Mercury	87309-05-30 17:03 G	33610167.10	33610167.21	33610167.34	0.0082	0.0043
Mercury	87309-08-26 18:29 G	33610255.14	33610255.27	33610255.41	0.0082	0.0023
Mercury	87309-11-22 19:56 G	33610343.19	33610343.33	33610343.48	0.0082	0.0003
Mercury	87310-02-18 21:22 G	33610431.25	33610431.39	33610431.53	0.0082	0.0018
Mercury	87310-05-17 22:48 G	33610519.32	33610519.45	33610519.58	0.0082	0.0038
Mercury	87310-08-14 00:15 G	33610607.41	33610607.51	33610607.61	0.0082	0.0058
Mercury	87310-11-10 01:12 G	33610695.53	33610695.55	33610695.60	0.0081	0.0078
Earth	87311-09-23 03:36 G	33611012.59	33611012.65	33611012.77	0.0081	0.0076
Moon	87311-09-23 04:05 G	33611012.62	33611012.67	33611012.75	0.0081	0.0078 *
Venus	87316-11-15 07:56 G	33612892.64	33612892.83	33612893.06	0.0078	0.0028
Venus	87317-06-28 18:15 G	33613118.08	33613118.26	33613118.45	0.0078	0.0043
Mercury	87464-11-27 13:12 G	33666960.98	33666961.05	33666961.16	0.0061	0.0053
Mercury	87465-02-23 14:24 G	33667048.98	33667049.10	33667049.24	0.0062	0.0042
Mercury	87465-05-22 15:22 G	33667137.00	33667137.14	33667137.30	0.0062	0.0032
Mercury	87465-08-18 16:34 G	33667225.03	33667225.19	33667225.36	0.0062	0.0021
Mercury	87465-11-14 17:32 G	33667313.07	33667313.23	33667313.41	0.0062	0.0011
Mercury	87466-02-10 18:44 G	33667401.11	33667401.28	33667401.46	0.0062	0.0001
Mercury	87466-05-09 19:41 G	33667489.15	33667489.32	33667489.50	0.0062	0.0011
Mercury	87466-08-05 20:39 G	33667577.20	33667577.36	33667577.53	0.0062	0.0021
Mercury	87466-11-01 21:22 G	33667665.26	33667665.39	33667665.56	0.0062	0.0032
Mercury	87467-01-28 22:34 G	33667753.33	33667753.44	33667753.58	0.0062	0.0043
Mercury	87467-04-26 23:32 G	33667841.41	33667841.48	33667841.59	0.0062	0.0053
Earth	87468-03-25 01:56 G	33668174.36	33668174.58	33668174.83	0.0062	0.0024
Moon	87468-03-25 05:03 G	33668174.49	33668174.71	33668174.97	0.0062	0.0025 *
Moon	87469-03-26 09:22 G	33668540.79	33668540.89	33668541.03	0.0063	0.0055
Earth	87469-03-26 11:46 G	33668540.88	33668540.99	33668541.12	0.0063	0.0055 *

Mars	87471-10-09 22:05 G	33669468.15	33669468.42	33669468.71	0.0064	0.0022
Venus	87476-07-07 03:22 G	33671200.61	33671200.64	33671200.71	0.0065	0.0064
Venus	87477-02-17 08:10 G	33671425.64	33671425.84	33671426.04	0.0066	0.0023
Venus	87477-09-30 12:15 G	33671650.81	33671651.01	33671651.23	0.0066	0.0018
Venus	87478-05-13 16:34 G	33671876.11	33671876.19	33671876.29	0.0066	0.0060
Mercury	87557-01-02 23:17 G	33700599.41	33700599.47	33700599.55	0.0082	0.0072
Mercury	87557-04-01 00:44 G	33700687.43	33700687.53	33700687.65	0.0082	0.0051
Mercury	87557-06-28 02:10 G	33700775.46	33700775.59	33700775.73	0.0082	0.0031
Mercury	87557-09-24 03:36 G	33700863.51	33700863.65	33700863.80	0.0082	0.0011
Mercury	87557-12-21 05:03 G	33700951.57	33700951.71	33700951.86	0.0082	0.0010
Mercury	87558-03-19 06:29 G	33701039.64	33701039.77	33701039.91	0.0082	0.0030
Mercury	87558-06-15 07:41 G	33701127.72	33701127.82	33701127.94	0.0082	0.0050
Mercury	87558-09-11 08:53 G	33701215.82	33701215.87	33701215.96	0.0081	0.0071
Earth	87559-09-26 17:03 G	33701596.20	33701596.21	33701596.28	0.0081	0.0080
Mars	87561-03-19 02:24 G	33702135.31	33702135.60	33702135.94	0.0080	0.0027
Venus	87564-10-20 15:51 G	33703446.98	33703447.16	33703447.39	0.0078	0.0034
Venus	87565-06-03 01:56 G	33703672.40	33703672.58	33703672.79	0.0078	0.0038
Mercury	87712-07-02 19:41 G	33757393.31	33757393.32	33757393.37	0.0061	0.0061
Mercury	87712-09-28 20:39 G	33757481.28	33757481.36	33757481.49	0.0061	0.0051
Mercury	87712-12-25 22:05 G	33757569.29	33757569.42	33757569.56	0.0062	0.0040
Mercury	87713-03-23 22:48 G	33757657.32	33757657.45	33757657.62	0.0062	0.0030
Mercury	87713-06-20 00:15 G	33757745.35	33757745.51	33757745.68	0.0062	0.0019
Mercury	87713-09-16 01:12 G	33757833.38	33757833.55	33757833.73	0.0062	0.0009
Mercury	87713-12-13 02:24 G	33757921.42	33757921.60	33757921.77	0.0062	0.0002
Mercury	87714-03-11 03:08 G	33758009.47	33758009.63	33758009.81	0.0062	0.0013
Mercury	87714-06-07 04:20 G	33758097.52	33758097.68	33758097.85	0.0062	0.0023
Mercury	87714-09-03 05:03 G	33758185.58	33758185.71	33758185.87	0.0062	0.0034
Mercury	87714-11-30 06:15 G	33758273.65	33758273.76	33758273.89	0.0062	0.0045
Mercury	87715-02-26 07:12 G	33758361.74	33758361.80	33758361.89	0.0062	0.0055
Moon	87716-03-28 16:05 G	33758757.92	33758758.17	33758758.42	0.0063	0.0011

Earth	87716-03-28 18:29 G	33758758.03	33758758.27	33758758.53	0.0063	0.0014	*
Moon	87717-03-30 04:48 G	33759124.68	33759124.70	33759124.77	0.0063	0.0062	
Venus	87724-06-11 14:24 G	33761755.02	33761755.10	33761755.19	0.0065	0.0060	
Venus	87725-01-22 18:29 G	33761980.08	33761980.27	33761980.49	0.0066	0.0020	
Venus	87725-09-04 22:48 G	33762205.26	33762205.45	33762205.67	0.0066	0.0022	
Venus	87726-04-18 03:08 G	33762430.59	33762430.63	33762430.71	0.0066	0.0063	
Mercury	87804-11-04 07:56 G	33791119.77	33791119.83	33791119.91	0.0082	0.0071	
Mercury	87805-01-31 09:36 G	33791207.79	33791207.90	33791208.01	0.0082	0.0051	
Mercury	87805-04-29 10:48 G	33791295.82	33791295.95	33791296.09	0.0082	0.0031	
Mercury	87805-07-26 12:15 G	33791383.87	33791384.01	33791384.16	0.0082	0.0010	
Mercury	87805-10-22 13:41 G	33791471.93	33791472.07	33791472.22	0.0082	0.0010	
Mercury	87806-01-18 14:53 G	33791560.00	33791560.12	33791560.26	0.0082	0.0031	
Mercury	87806-04-16 16:20 G	33791648.08	33791648.18	33791648.30	0.0082	0.0051	
Mercury	87806-07-13 17:32 G	33791736.18	33791736.23	33791736.32	0.0082	0.0071	
Moon	87806-09-28 03:22 G	33791812.59	33791812.64	33791812.76	0.0081	0.0078	
Earth	87806-09-28 04:05 G	33791812.62	33791812.67	33791812.77	0.0081	0.0078	*
Venus	87812-09-25 03:08 G	33794001.42	33794001.63	33794001.84	0.0078	0.0028	
Venus	87813-05-08 12:44 G	33794226.85	33794227.03	33794227.22	0.0078	0.0043	
Mercury	87960-05-04 03:51 G	33847913.61	33847913.66	33847913.75	0.0061	0.0056	
Mercury	87960-07-31 05:17 G	33848001.60	33848001.72	33848001.84	0.0062	0.0045	
Mercury	87960-10-27 06:00 G	33848089.62	33848089.75	33848089.91	0.0062	0.0035	
Mercury	87961-01-23 06:58 G	33848177.65	33848177.79	33848177.97	0.0062	0.0025	
Mercury	87961-04-21 08:10 G	33848265.68	33848265.84	33848266.02	0.0062	0.0014	
Mercury	87961-07-18 09:22 G	33848353.72	33848353.89	33848354.07	0.0062	0.0003	
Mercury	87961-10-14 10:34 G	33848441.76	33848441.94	33848442.11	0.0062	0.0007	
Mercury	87962-01-10 11:17 G	33848529.81	33848529.97	33848530.15	0.0062	0.0018	
Mercury	87962-04-08 12:29 G	33848617.87	33848618.02	33848618.18	0.0062	0.0028	
Mercury	87962-07-05 13:12 G	33848705.93	33848706.05	33848706.20	0.0062	0.0039	
Mercury	87962-10-01 14:39 G	33848794.01	33848794.11	33848794.21	0.0062	0.0050	
Mercury	87962-12-28 15:22 G	33848882.11	33848882.14	33848882.19	0.0062	0.0060	

Earth	87964-04-01 13:12 G	33849341.79	33849342.05	33849342.30	0.0063	0.0001
Moon	87964-04-01 15:22 G	33849341.88	33849342.14	33849342.40	0.0063	0.0002 *
Venus	87972-05-17 02:10 G	33852309.47	33852309.59	33852309.73	0.0065	0.0052
Venus	87972-12-28 06:29 G	33852534.56	33852534.77	33852534.99	0.0066	0.0011
Venus	87973-08-10 10:48 G	33852759.76	33852759.95	33852760.15	0.0066	0.0030

# 89TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 89th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	88052-06-08 16:20 G	33881552.17	33881552.18	33881552.20	0.0083	0.0082		
Mercury	88052-09-04 17:32 G	33881640.15	33881640.23	33881640.33	0.0082	0.0062		
Mercury	88052-12-01 18:58 G	33881728.17	33881728.29	33881728.42	0.0082	0.0041		
Mercury	88053-02-27 20:24 G	33881816.21	33881816.35	33881816.49	0.0082	0.0021		
Mercury	88053-05-26 21:51 G	33881904.27	33881904.41	33881904.55	0.0082	0.0001		
Mercury	88053-08-22 23:03 G	33881992.33	33881992.46	33881992.61	0.0082	0.0020		
Mercury	88053-11-19 00:29 G	33882080.40	33882080.52	33882080.65	0.0082	0.0040		
Mercury	88054-02-15 01:56 G	33882168.49	33882168.58	33882168.68	0.0082	0.0060		
Mercury	88054-05-14 03:22 G	33882256.62	33882256.64	33882256.67	0.0082	0.0080		
Earth	88054-10-01 03:36 G	33882396.44	33882396.65	33882396.91	0.0081	0.0037		
Moon	88054-10-01 05:46 G	33882396.51	33882396.74	33882396.98	0.0081	0.0032 *		
Venus	88060-08-29 16:34 G	33884555.98	33884556.19	33884556.43	0.0078	0.0010		
Venus	88061-04-12 02:24 G	33884781.48	33884781.60	33884781.75	0.0078	0.0062		

Mercury	88207-12-08 11:46 G	33938345.94	33938345.99	33938346.09	0.0061	0.0056
Mercury	88208-03-05 12:44 G	33938433.94	33938434.03	33938434.17	0.0061	0.0046
Mercury	88208-06-01 14:10 G	33938521.95	33938522.09	33938522.24	0.0062	0.0035
Mercury	88208-08-28 15:08 G	33938609.98	33938610.13	33938610.30	0.0062	0.0024
Mercury	88208-11-24 16:20 G	33938698.01	33938698.18	33938698.36	0.0062	0.0014
Mercury	88209-02-20 17:17 G	33938786.05	33938786.22	33938786.40	0.0062	0.0004
Mercury	88209-05-19 18:29 G	33938874.10	33938874.27	33938874.45	0.0062	0.0007
Mercury	88209-08-15 19:27 G	33938962.15	33938962.31	33938962.48	0.0062	0.0018
Mercury	88209-11-11 20:24 G	33939050.20	33939050.35	33939050.51	0.0062	0.0028
Mercury	88210-02-07 21:22 G	33939138.26	33939138.39	33939138.54	0.0062	0.0039
Mercury	88210-05-06 22:34 G	33939226.34	33939226.44	33939226.55	0.0062	0.0050
Mercury	88210-08-02 23:17 G	33939314.45	33939314.47	33939314.53	0.0062	0.0061
Earth	88211-04-05 00:29 G	33939559.42	33939559.52	33939559.68	0.0062	0.0054
Moon	88211-04-05 04:05 G	33939559.54	33939559.67	33939559.82	0.0062	0.0052 *
Moon	88212-04-05 09:22 G	33939925.67	33939925.89	33939926.13	0.0063	0.0022
Earth	88212-04-05 10:34 G	33939925.72	33939925.94	33939926.19	0.0063	0.0025 *
Mars	88214-09-21 15:51 G	33940824.91	33940825.16	33940825.44	0.0064	0.0029
Venus	88220-04-21 16:05 G	33942864.00	33942864.17	33942864.36	0.0066	0.0036
Venus	88220-12-02 20:39 G	33943089.14	33943089.36	33943089.58	0.0066	0.0005
Venus	88221-07-16 00:15 G	33943314.39	33943314.51	33943314.69	0.0066	0.0047
Mercury	88300-04-11 02:39 G	33972072.53	33972072.61	33972072.70	0.0082	0.0066
Mercury	88300-07-08 03:51 G	33972160.55	33972160.66	33972160.79	0.0082	0.0046
Mercury	88300-10-04 05:17 G	33972248.59	33972248.72	33972248.86	0.0082	0.0025
Mercury	88300-12-31 06:44 G	33972336.64	33972336.78	33972336.93	0.0082	0.0005
Mercury	88301-03-29 08:10 G	33972424.70	33972424.84	33972424.98	0.0082	0.0015
Mercury	88301-06-25 09:22 G	33972512.77	33972512.89	33972513.03	0.0082	0.0036
Mercury	88301-09-21 10:34 G	33972600.85	33972600.94	33972601.06	0.0082	0.0056
Mercury	88301-12-18 12:00 G	33972688.96	33972689.00	33972689.06	0.0082	0.0076
Moon	88302-10-06 05:46 G	33972980.49	33972980.74	33972981.02	0.0081	0.0020
Earth	88302-10-06 07:41 G	33972980.58	33972980.82	33972981.09	0.0081	0.0018 *

Mars	88304-02-27 12:58 G	33973489.72	33973490.04	33973490.39	0.0080	0.0012
Venus	88307-12-23 22:05 G	33974885.28	33974885.42	33974885.60	0.0078	0.0053
Venus	88308-08-05 08:24 G	33975110.65	33975110.85	33975111.08	0.0078	0.0019
Mercury	88455-07-12 20:10 G	34028778.27	34028778.34	34028778.45	0.0061	0.0053
Mercury	88455-10-08 21:08 G	34028866.27	34028866.38	34028866.53	0.0061	0.0043
Mercury	88456-01-04 22:34 G	34028954.29	34028954.44	34028954.60	0.0062	0.0032
Mercury	88456-04-01 23:32 G	34029042.32	34029042.48	34029042.65	0.0062	0.0022
Mercury	88456-06-29 00:44 G	34029130.36	34029130.53	34029130.71	0.0062	0.0011
Mercury	88456-09-25 01:41 G	34029218.40	34029218.57	34029218.75	0.0062	0.0002
Mercury	88456-12-22 02:53 G	34029306.45	34029306.62	34029306.79	0.0062	0.0010
Mercury	88457-03-20 03:36 G	34029394.50	34029394.65	34029394.83	0.0062	0.0021
Mercury	88457-06-16 04:48 G	34029482.56	34029482.70	34029482.86	0.0062	0.0031
Mercury	88457-09-12 05:46 G	34029570.62	34029570.74	34029570.88	0.0062	0.0042
Mercury	88457-12-09 06:58 G	34029658.71	34029658.79	34029658.89	0.0062	0.0053
Moon	88459-04-07 22:05 G	34030143.21	34030143.42	34030143.68	0.0063	0.0022
Earth	88459-04-08 00:29 G	34030143.29	34030143.52	34030143.76	0.0063	0.0024 *
Earth	88460-04-08 09:36 G	34030509.81	34030509.90	34030510.06	0.0063	0.0055
Moon	88460-04-08 10:20 G	34030509.81	34030509.93	34030510.11	0.0063	0.0052 *
Venus	88467-08-14 02:53 G	34033193.53	34033193.62	34033193.76	0.0065	0.0056
Venus	88468-03-26 07:27 G	34033418.61	34033418.81	34033419.04	0.0066	0.0015
Venus	88468-11-06 11:46 G	34033643.80	34033643.99	34033644.20	0.0066	0.0027
Mercury	88547-08-18 11:03 G	34062416.94	34062416.96	34062417.00	0.0083	0.0081
Mercury	88547-11-14 12:15 G	34062504.93	34062505.01	34062505.12	0.0083	0.0061
Mercury	88548-02-10 13:56 G	34062592.96	34062593.08	34062593.21	0.0082	0.0040
Mercury	88548-05-08 15:22 G	34062681.00	34062681.14	34062681.28	0.0082	0.0020
Mercury	88548-08-04 16:48 G	34062769.05	34062769.20	34062769.34	0.0082	0.0002
Mercury	88548-10-31 18:00 G	34062857.12	34062857.25	34062857.39	0.0082	0.0021
Mercury	88549-01-27 19:27 G	34062945.19	34062945.31	34062945.44	0.0082	0.0041
Mercury	88549-04-25 20:39 G	34063033.27	34063033.36	34063033.46	0.0082	0.0061
Mercury	88549-07-22 22:05 G	34063121.41	34063121.42	34063121.44	0.0082	0.0081

Jupiter	88554-12-15 02:39 G	34065092.11	34065092.61	34065093.15	0.0079	0.0031
Venus	88555-11-27 17:17 G	34065440.01	34065440.22	34065440.45	0.0078	0.0012
Venus	88556-07-10 03:22 G	34065665.51	34065665.64	34065665.79	0.0078	0.0060
Mercury	88702-11-20 04:34 G	34119122.63	34119122.69	34119122.79	0.0061	0.0054
Mercury	88703-02-16 06:00 G	34119210.63	34119210.75	34119210.87	0.0061	0.0044
Mercury	88703-05-15 06:43 G	34119298.65	34119298.78	34119298.94	0.0062	0.0034
Mercury	88703-08-11 08:10 G	34119386.67	34119386.84	34119387.00	0.0062	0.0023
Mercury	88703-11-07 08:53 G	34119474.71	34119474.87	34119475.06	0.0062	0.0013
Mercury	88704-02-03 10:05 G	34119562.75	34119562.92	34119563.10	0.0062	0.0003
Mercury	88704-05-01 11:03 G	34119650.80	34119650.96	34119651.15	0.0062	0.0009
Mercury	88704-07-28 12:15 G	34119738.85	34119739.01	34119739.18	0.0062	0.0019
Mercury	88704-10-24 12:58 G	34119826.90	34119827.04	34119827.21	0.0062	0.0030
Mercury	88705-01-20 14:10 G	34119914.97	34119915.09	34119915.24	0.0062	0.0041
Mercury	88705-04-18 15:07 G	34120003.05	34120003.13	34120003.25	0.0062	0.0051
Mercury	88705-07-15 16:34 G	34120091.17	34120091.19	34120091.21	0.0062	0.0062
Moon	88706-04-11 15:07 G	34120361.13	34120361.13	34120361.17	0.0062	0.0062
Earth	88706-04-11 18:15 G	34120361.24	34120361.26	34120361.31	0.0062	0.0062
Earth	88707-04-13 03:51 G	34120727.43	34120727.66	34120727.92	0.0063	0.0016
Moon	88707-04-13 06:15 G	34120727.51	34120727.76	34120728.02	0.0063	0.0016 *
Mars	88709-05-25 00:00 G	34121500.21	34121500.50	34121500.80	0.0063	0.0012
Venus	88715-07-20 20:39 G	34123748.18	34123748.36	34123748.58	0.0066	0.0026
Venus	88716-03-02 01:12 G	34123973.35	34123973.55	34123973.77	0.0066	0.0016
Venus	88716-10-13 05:31 G	34124198.64	34124198.73	34124198.85	0.0066	0.0058
Mercury	88795-03-23 21:22 G	34152849.33	34152849.39	34152849.48	0.0083	0.0070
Mercury	88795-06-19 23:03 G	34152937.35	34152937.46	34152937.58	0.0082	0.0049
Mercury	88795-09-16 00:29 G	34153025.39	34153025.52	34153025.65	0.0082	0.0029
Mercury	88795-12-13 01:55 G	34153113.43	34153113.58	34153113.72	0.0082	0.0008
Mercury	88796-03-10 03:07 G	34153201.49	34153201.63	34153201.78	0.0082	0.0012
Mercury	88796-06-06 04:34 G	34153289.56	34153289.69	34153289.82	0.0082	0.0032
Mercury	88796-09-02 05:46 G	34153377.64	34153377.74	34153377.86	0.0082	0.0052

Mercury	88796-11-29 07:12 G	34153465.74	34153465.80	34153465.87	0.0082	0.0072
Earth	88797-10-11 22:19 G	34153782.17	34153782.43	34153782.69	0.0081	0.0001
Moon	88797-10-12 00:00 G	34153782.25	34153782.50	34153782.76	0.0081	0.0006 *
Venus	88803-03-22 04:19 G	34155769.49	34155769.68	34155769.89	0.0078	0.0033
Venus	88803-11-02 14:24 G	34155994.91	34155995.10	34155995.30	0.0078	0.0038
Mercury	88950-03-28 13:55 G	34209466.99	34209467.08	34209467.17	0.0061	0.0052
Mercury	88950-06-24 14:39 G	34209555.00	34209555.11	34209555.26	0.0061	0.0042
Mercury	88950-09-20 15:36 G	34209643.02	34209643.15	34209643.32	0.0062	0.0032
Mercury	88950-12-17 17:03 G	34209731.05	34209731.21	34209731.38	0.0062	0.0021
Mercury	88951-03-15 18:15 G	34209819.08	34209819.26	34209819.43	0.0062	0.0010
Mercury	88951-06-11 19:12 G	34209907.12	34209907.30	34209907.48	0.0062	0.0001
Mercury	88951-09-07 20:10 G	34209995.17	34209995.34	34209995.52	0.0062	0.0011
Mercury	88951-12-04 21:07 G	34210083.23	34210083.38	34210083.56	0.0062	0.0022
Mercury	88952-03-01 22:19 G	34210171.28	34210171.43	34210171.59	0.0062	0.0032
Mercury	88952-05-28 23:03 G	34210259.35	34210259.46	34210259.61	0.0062	0.0043
Mercury	88952-08-25 00:29 G	34210347.44	34210347.52	34210347.61	0.0062	0.0053
Earth	88954-04-15 00:15 G	34210945.26	34210945.51	34210945.76	0.0063	0.0015
Moon	88954-04-15 03:22 G	34210945.39	34210945.64	34210945.90	0.0063	0.0012 *
Moon	88955-04-16 09:07 G	34211311.82	34211311.88	34211311.95	0.0063	0.0060
Venus	88962-11-11 12:00 G	34214077.82	34214078.00	34214078.21	0.0066	0.0030
Venus	88963-06-24 16:34 G	34214302.98	34214303.19	34214303.41	0.0066	0.0012
Venus	88964-02-04 20:39 G	34214528.26	34214528.36	34214528.51	0.0066	0.0054

# 90TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 90th millennium CE.



PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	89042-07-31 07:55	G	34243193.76	34243193.83	34243193.93	0.0083	0.0066	
Mercury	89042-10-27 09:22	G	34243281.78	34243281.89	34243282.02	0.0083	0.0046	
Mercury	89043-01-23 11:03	G	34243369.82	34243369.96	34243370.09	0.0082	0.0025	
Mercury	89043-04-21 12:15	G	34243457.87	34243458.01	34243458.16	0.0082	0.0005	
Mercury	89043-07-18 13:41	G	34243545.93	34243546.07	34243546.21	0.0082	0.0016	
Mercury	89043-10-14 14:53	G	34243634.00	34243634.12	34243634.26	0.0082	0.0036	
Mercury	89044-01-10 16:19	G	34243722.08	34243722.18	34243722.29	0.0082	0.0056	
Mercury	89044-04-07 17:31	G	34243810.19	34243810.23	34243810.29	0.0082	0.0076	
Earth	89044-10-14 10:34	G	34243999.81	34243999.94	34244000.14	0.0081	0.0064	
Moon	89044-10-14 11:17	G	34243999.83	34243999.97	34244000.15	0.0081	0.0064	*
Venus	89050-07-14 19:12	G	34246099.12	34246099.30	34246099.51	0.0078	0.0038	
Venus	89051-02-25 05:17	G	34246324.54	34246324.72	34246324.94	0.0078	0.0035	
Mercury	89197-05-08 23:03	G	34299723.38	34299723.46	34299723.56	0.0061	0.0053	
Mercury	89197-08-04 23:46	G	34299811.38	34299811.49	34299811.64	0.0061	0.0043	
Mercury	89197-11-01 01:12	G	34299899.40	34299899.55	34299899.71	0.0061	0.0032	
Mercury	89198-01-28 02:10	G	34299987.43	34299987.59	34299987.77	0.0062	0.0022	
Mercury	89198-04-26 03:22	G	34300075.47	34300075.64	34300075.82	0.0062	0.0011	
Mercury	89198-07-23 04:34	G	34300163.51	34300163.69	34300163.87	0.0062	0.0001	
Mercury	89198-10-19 05:17	G	34300251.56	34300251.72	34300251.91	0.0062	0.0011	
Mercury	89199-01-15 06:29	G	34300339.61	34300339.77	34300339.95	0.0062	0.0021	
Mercury	89199-04-13 07:12	G	34300427.67	34300427.80	34300427.98	0.0062	0.0032	
Mercury	89199-07-10 08:24	G	34300515.74	34300515.85	34300516.00	0.0062	0.0042	
Mercury	89199-10-06 09:22	G	34300603.82	34300603.89	34300604.00	0.0062	0.0053	
Earth	89201-04-18 00:58	G	34301163.34	34301163.54	34301163.77	0.0063	0.0033	
Moon	89201-04-18 04:34	G	34301163.50	34301163.69	34301163.92	0.0063	0.0036	*
Moon	89202-04-19 08:10	G	34301529.71	34301529.84	34301530.04	0.0063	0.0048	
Earth	89202-04-19 10:48	G	34301529.79	34301529.95	34301530.15	0.0063	0.0045	*

Venus	89209-07-24 01:55 G	34304182.56	34304182.58	34304182.67	0.0065	0.0064
Venus	89210-03-06 06:29 G	34304407.59	34304407.77	34304408.00	0.0066	0.0023
Venus	89210-10-17 11:03 G	34304632.76	34304632.96	34304633.18	0.0066	0.0019
Venus	89211-05-30 15:07 G	34304858.07	34304858.13	34304858.23	0.0066	0.0061
Mercury	89289-09-09 18:15 G	34333450.20	34333450.26	34333450.33	0.0083	0.0073
Mercury	89289-12-06 19:27 G	34333538.21	34333538.31	34333538.43	0.0083	0.0053
Mercury	89290-03-04 20:53 G	34333626.25	34333626.37	34333626.51	0.0082	0.0033
Mercury	89290-05-31 22:19 G	34333714.29	34333714.43	34333714.58	0.0082	0.0012
Mercury	89290-08-27 23:46 G	34333802.35	34333802.49	34333802.63	0.0082	0.0008
Mercury	89290-11-24 00:58 G	34333890.41	34333890.54	34333890.68	0.0082	0.0029
Mercury	89291-02-20 02:24 G	34333978.49	34333978.60	34333978.72	0.0082	0.0048
Mercury	89291-05-19 03:51 G	34334066.58	34334066.66	34334066.74	0.0082	0.0068
Moon	89292-10-18 12:00 G	34334584.89	34334585.00	34334585.14	0.0081	0.0072
Earth	89292-10-18 12:15 G	34334584.90	34334585.01	34334585.18	0.0081	0.0068 *
Mars	89293-06-28 22:34 G	34334838.10	34334838.44	34334838.78	0.0081	0.0006
Venus	89297-11-05 13:27 G	34336428.87	34336429.06	34336429.28	0.0078	0.0029
Venus	89298-06-18 23:31 G	34336654.30	34336654.48	34336654.68	0.0078	0.0043
Mercury	89444-03-23 08:10 G	34389891.80	34389891.84	34389891.90	0.0061	0.0059
Mercury	89444-06-19 08:53 G	34389979.78	34389979.87	34389980.00	0.0061	0.0049
Mercury	89444-09-15 10:19 G	34390067.80	34390067.93	34390068.08	0.0061	0.0038
Mercury	89444-12-12 11:17 G	34390155.82	34390155.97	34390156.14	0.0062	0.0028
Mercury	89445-03-10 12:29 G	34390243.85	34390244.02	34390244.19	0.0062	0.0017
Mercury	89445-06-06 13:27 G	34390331.89	34390332.06	34390332.25	0.0062	0.0007
Mercury	89445-09-02 14:39 G	34390419.94	34390420.11	34390420.29	0.0062	0.0004
Mercury	89445-11-29 15:36 G	34390507.98	34390508.15	34390508.33	0.0062	0.0015
Mercury	89446-02-25 16:48 G	34390596.04	34390596.20	34390596.36	0.0062	0.0025
Mercury	89446-05-24 17:31 G	34390684.10	34390684.23	34390684.39	0.0062	0.0036
Mercury	89446-08-20 18:58 G	34390772.18	34390772.29	34390772.41	0.0062	0.0046
Mercury	89446-11-16 19:41 G	34390860.27	34390860.32	34390860.40	0.0062	0.0057
Earth	89448-04-21 04:48 G	34391381.54	34391381.70	34391381.92	0.0063	0.0042

Moon	89448-04-21 08:10 G	34391381.68	34391381.84	34391382.06	0.0063	0.0042 *
Moon	89449-04-22 12:00 G	34391747.80	34391748.00	34391748.21	0.0063	0.0036
Earth	89449-04-22 15:07 G	34391747.93	34391748.13	34391748.35	0.0063	0.0036 *
Mars	89450-06-18 10:48 G	34392169.67	34392169.95	34392170.25	0.0063	0.0012
Venus	89456-11-15 23:03 G	34394512.33	34394512.46	34394512.63	0.0066	0.0048
Venus	89457-06-29 03:36 G	34394737.44	34394737.65	34394737.87	0.0066	0.0007
Venus	89458-02-09 08:10 G	34394962.66	34394962.84	34394963.02	0.0066	0.0035
Mercury	89536-10-22 05:46 G	34423706.66	34423706.74	34423706.84	0.0083	0.0065
Mercury	89537-01-18 07:12 G	34423794.69	34423794.80	34423794.93	0.0083	0.0045
Mercury	89537-04-16 08:39 G	34423882.73	34423882.86	34423883.00	0.0082	0.0024
Mercury	89537-07-13 10:05 G	34423970.78	34423970.92	34423971.06	0.0082	0.0004
Mercury	89537-10-09 11:31 G	34424058.84	34424058.98	34424059.12	0.0082	0.0016
Mercury	89538-01-05 12:43 G	34424146.91	34424147.03	34424147.16	0.0082	0.0036
Mercury	89538-04-03 14:10 G	34424234.99	34424235.09	34424235.19	0.0082	0.0056
Mercury	89538-06-30 15:36 G	34424323.10	34424323.15	34424323.20	0.0082	0.0076
Earth	89539-10-23 15:36 G	34424802.99	34424803.15	34424803.37	0.0081	0.0056
Moon	89539-10-23 16:34 G	34424803.01	34424803.19	34424803.43	0.0081	0.0052 *
Venus	89544-07-19 03:07 G	34426533.55	34426533.63	34426533.74	0.0079	0.0071
Venus	89545-03-01 13:41 G	34426758.84	34426759.07	34426759.29	0.0078	0.0003
Venus	89545-10-12 23:03 G	34426984.41	34426984.46	34426984.55	0.0078	0.0074
Mercury	89691-02-04 18:43 G	34480060.22	34480060.28	34480060.33	0.0061	0.0058
Mercury	89691-05-03 19:12 G	34480148.21	34480148.30	34480148.43	0.0061	0.0048
Mercury	89691-07-30 20:10 G	34480236.22	34480236.34	34480236.51	0.0061	0.0038
Mercury	89691-10-26 21:36 G	34480324.25	34480324.40	34480324.57	0.0062	0.0027
Mercury	89692-01-22 22:34 G	34480412.28	34480412.44	34480412.63	0.0062	0.0017
Mercury	89692-04-20 00:00 G	34480500.32	34480500.50	34480500.68	0.0062	0.0006
Mercury	89692-07-17 00:58 G	34480588.37	34480588.54	34480588.72	0.0062	0.0005
Mercury	89692-10-13 01:55 G	34480676.42	34480676.58	34480676.76	0.0062	0.0016
Mercury	89693-01-09 03:07 G	34480764.47	34480764.63	34480764.79	0.0062	0.0026
Mercury	89693-04-07 03:51 G	34480852.54	34480852.66	34480852.82	0.0062	0.0037

Mercury	89693-07-04 05:03 G	34480940.61	34480940.71	34480940.84	0.0062	0.0048
Mercury	89693-09-30 06:00 G	34481028.71	34481028.75	34481028.83	0.0062	0.0058
Earth	89695-04-24 13:27 G	34481599.89	34481600.06	34481600.29	0.0063	0.0039
Moon	89695-04-24 15:51 G	34481599.98	34481600.16	34481600.39	0.0063	0.0037 *
Moon	89696-04-24 19:55 G	34481966.15	34481966.33	34481966.57	0.0063	0.0037
Earth	89696-04-24 23:46 G	34481966.30	34481966.49	34481966.70	0.0063	0.0039 *
Venus	89703-07-29 18:43 G	34484617.24	34484617.28	34484617.36	0.0065	0.0063
Venus	89704-03-10 23:17 G	34484842.28	34484842.47	34484842.69	0.0066	0.0022
Venus	89704-10-22 03:36 G	34485067.45	34485067.65	34485067.87	0.0066	0.0020
Venus	89705-06-04 07:41 G	34485292.77	34485292.82	34485292.91	0.0066	0.0063
Mercury	89783-09-05 17:17 G	34513875.15	34513875.22	34513875.30	0.0083	0.0068
Mercury	89783-12-02 18:29 G	34513963.17	34513963.27	34513963.40	0.0083	0.0048
Mercury	89784-02-28 19:55 G	34514051.20	34514051.33	34514051.47	0.0083	0.0028
Mercury	89784-05-26 21:22 G	34514139.25	34514139.39	34514139.54	0.0082	0.0007
Mercury	89784-08-22 22:48 G	34514227.31	34514227.45	34514227.59	0.0082	0.0013
Mercury	89784-11-19 00:00 G	34514315.38	34514315.50	34514315.64	0.0082	0.0033
Mercury	89785-02-15 01:27 G	34514403.45	34514403.56	34514403.67	0.0082	0.0053
Mercury	89785-05-14 02:39 G	34514491.56	34514491.61	34514491.68	0.0082	0.0073
Earth	89786-10-26 00:29 G	34515021.37	34515021.52	34515021.71	0.0081	0.0062
Moon	89786-10-26 02:53 G	34515021.48	34515021.62	34515021.81	0.0081	0.0063 *
Venus	89791-11-11 05:46 G	34516863.54	34516863.74	34516863.96	0.0078	0.0027
Venus	89792-06-23 15:36 G	34517088.98	34517089.15	34517089.35	0.0078	0.0045
Mercury	89937-12-21 05:03 G	34570228.64	34570228.71	34570228.82	0.0061	0.0053
Mercury	89938-03-19 06:29 G	34570316.65	34570316.77	34570316.90	0.0061	0.0043
Mercury	89938-06-15 07:12 G	34570404.67	34570404.80	34570404.97	0.0061	0.0033
Mercury	89938-09-11 08:39 G	34570492.70	34570492.86	34570493.03	0.0062	0.0022
Mercury	89938-12-08 09:36 G	34570580.74	34570580.90	34570581.09	0.0062	0.0012
Mercury	89939-03-06 11:03 G	34570668.78	34570668.96	34570669.14	0.0062	0.0001
Mercury	89939-06-02 12:00 G	34570756.83	34570757.00	34570757.18	0.0062	0.0010
Mercury	89939-08-29 12:43 G	34570844.88	34570845.03	34570845.22	0.0062	0.0021

Mercury	89939-11-25 13:55 G	34570932.94	34570933.08	34570933.25	0.0062	0.0031
Mercury	89940-02-21 14:53 G	34571021.01	34571021.12	34571021.27	0.0062	0.0042
Mercury	89940-05-19 16:19 G	34571109.09	34571109.18	34571109.28	0.0062	0.0052
Earth	89942-04-29 00:58 G	34571818.34	34571818.54	34571818.79	0.0063	0.0029
Moon	89942-04-29 01:27 G	34571818.37	34571818.56	34571818.80	0.0063	0.0032 *
Moon	89943-04-30 07:55 G	34572184.73	34572184.83	34572185.01	0.0063	0.0053
Earth	89943-04-30 11:17 G	34572184.82	34572184.97	34572185.14	0.0063	0.0049 *
Venus	89950-11-21 20:39 G	34574947.17	34574947.36	34574947.56	0.0066	0.0030
Venus	89951-07-05 00:43 G	34575172.33	34575172.53	34575172.76	0.0066	0.0012
Venus	89952-02-15 04:48 G	34575397.60	34575397.70	34575397.85	0.0066	0.0055

# 91ST MILLENNIUM CE

This is a list of transits visible from Pluto in the 91st millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	90030-04-24 04:34 G		34603955.65	34603955.69	34603955.74	0.0083	0.0078	
Mercury	90030-07-21 05:46 G		34604043.65	34604043.74	34604043.85	0.0083	0.0058	
Mercury	90030-10-17 07:12 G		34604131.68	34604131.80	34604131.93	0.0083	0.0038	
Mercury	90031-01-13 08:39 G		34604219.73	34604219.86	34604220.00	0.0083	0.0018	
Mercury	90031-04-11 10:05 G		34604307.78	34604307.92	34604308.06	0.0082	0.0003	
Mercury	90031-07-08 11:17 G		34604395.84	34604395.97	34604396.11	0.0082	0.0023	
Mercury	90031-10-04 12:43 G		34604483.91	34604484.03	34604484.16	0.0082	0.0043	
Mercury	90031-12-31 13:55 G		34604572.00	34604572.08	34604572.18	0.0082	0.0063	

Earth	90032-10-27 08:53 G	34604872.87	34604872.87	34604872.92	0.0082	0.0082
Venus	90038-07-24 02:39 G	34606968.42	34606968.61	34606968.81	0.0078	0.0038
Venus	90039-03-06 12:29 G	34607193.84	34607194.02	34607194.23	0.0078	0.0035
Mercury	90184-08-07 15:51 G	34660309.09	34660309.16	34660309.27	0.0061	0.0054
Mercury	90184-11-03 17:17 G	34660397.10	34660397.22	34660397.35	0.0061	0.0043
Mercury	90185-01-30 18:15 G	34660485.12	34660485.26	34660485.42	0.0061	0.0033
Mercury	90185-04-28 19:27 G	34660573.15	34660573.31	34660573.48	0.0062	0.0022
Mercury	90185-07-25 20:39 G	34660661.19	34660661.36	34660661.54	0.0062	0.0011
Mercury	90185-10-21 21:51 G	34660749.23	34660749.41	34660749.59	0.0062	0.0001
Mercury	90186-01-17 22:48 G	34660837.28	34660837.45	34660837.63	0.0062	0.0010
Mercury	90186-04-15 23:46 G	34660925.33	34660925.49	34660925.67	0.0062	0.0021
Mercury	90186-07-13 00:58 G	34661013.39	34661013.54	34661013.70	0.0062	0.0031
Mercury	90186-10-09 01:41 G	34661101.46	34661101.57	34661101.72	0.0062	0.0042
Mercury	90187-01-05 03:07 G	34661189.54	34661189.63	34661189.73	0.0062	0.0052
Moon	90189-05-01 15:07 G	34662036.88	34662037.13	34662037.38	0.0063	0.0006
Earth	90189-05-01 16:05 G	34662036.93	34662037.17	34662037.44	0.0063	0.0009 *
Venus	90197-08-02 20:10 G	34665052.15	34665052.34	34665052.54	0.0066	0.0030
Venus	90198-03-16 00:29 G	34665277.31	34665277.52	34665277.74	0.0066	0.0012
Venus	90198-10-27 04:34 G	34665502.59	34665502.69	34665502.84	0.0066	0.0054
Mercury	90276-12-10 16:34 G	34694036.18	34694036.19	34694036.21	0.0083	0.0082
Mercury	90277-03-08 17:46 G	34694124.16	34694124.24	34694124.35	0.0083	0.0062
Mercury	90277-06-04 19:12 G	34694212.19	34694212.30	34694212.43	0.0083	0.0042
Mercury	90277-08-31 20:39 G	34694300.23	34694300.36	34694300.50	0.0083	0.0022
Mercury	90277-11-27 22:05 G	34694388.28	34694388.42	34694388.56	0.0082	0.0002
Mercury	90278-02-23 23:17 G	34694476.34	34694476.47	34694476.62	0.0082	0.0019
Mercury	90278-05-23 00:29 G	34694564.41	34694564.52	34694564.66	0.0082	0.0040
Mercury	90278-08-19 01:55 G	34694652.49	34694652.58	34694652.69	0.0082	0.0059
Mercury	90278-11-15 03:07 G	34694740.61	34694740.63	34694740.68	0.0082	0.0079
Moon	90279-11-01 03:22 G	34695091.40	34695091.64	34695091.90	0.0081	0.0032
Earth	90279-11-01 05:46 G	34695091.51	34695091.74	34695091.98	0.0081	0.0036 *

Venus	90285-04-05 00:58 G	34697073.37	34697073.54	34697073.75	0.0078	0.0041
Venus	90285-11-16 11:17 G	34697298.78	34697298.97	34697299.18	0.0078	0.0033
Mercury	90430-12-29 02:10 G	34750301.59	34750301.59	34750301.62	0.0061	0.0061
Mercury	90431-03-27 03:22 G	34750389.55	34750389.64	34750389.75	0.0061	0.0051
Mercury	90431-06-23 04:19 G	34750477.56	34750477.68	34750477.83	0.0061	0.0040
Mercury	90431-09-19 05:31 G	34750565.59	34750565.73	34750565.90	0.0061	0.0030
Mercury	90431-12-16 06:58 G	34750653.62	34750653.79	34750653.96	0.0062	0.0019
Mercury	90432-03-13 07:55 G	34750741.66	34750741.83	34750742.01	0.0062	0.0009
Mercury	90432-06-09 09:07 G	34750829.70	34750829.88	34750830.06	0.0062	0.0002
Mercury	90432-09-05 10:05 G	34750917.75	34750917.92	34750918.10	0.0062	0.0013
Mercury	90432-12-02 11:17 G	34751005.81	34751005.97	34751006.14	0.0062	0.0023
Mercury	90433-02-28 12:14 G	34751093.87	34751094.01	34751094.17	0.0062	0.0034
Mercury	90433-05-27 12:58 G	34751181.94	34751182.04	34751182.19	0.0062	0.0045
Mercury	90433-08-23 14:24 G	34751270.03	34751270.10	34751270.19	0.0062	0.0055
Earth	90435-05-04 22:34 G	34751889.39	34751889.44	34751889.54	0.0063	0.0060
Moon	90435-05-05 02:38 G	34751889.54	34751889.61	34751889.70	0.0063	0.0059 *
Moon	90436-05-05 06:14 G	34752255.53	34752255.76	34752256.01	0.0063	0.0018
Earth	90436-05-05 09:07 G	34752255.64	34752255.88	34752256.13	0.0063	0.0017 *
Venus	90444-04-14 21:07 G	34755157.19	34755157.38	34755157.59	0.0066	0.0025
Venus	90444-11-26 01:26 G	34755382.36	34755382.56	34755382.78	0.0066	0.0017
Venus	90445-07-09 05:31 G	34755607.65	34755607.73	34755607.84	0.0066	0.0059
Mercury	90523-07-30 05:46 G	34784116.69	34784116.74	34784116.79	0.0083	0.0076
Mercury	90523-10-26 06:58 G	34784204.69	34784204.79	34784204.90	0.0083	0.0056
Mercury	90524-01-22 08:24 G	34784292.72	34784292.85	34784292.98	0.0083	0.0036
Mercury	90524-04-19 09:36 G	34784380.77	34784380.90	34784381.05	0.0083	0.0016
Mercury	90524-07-16 11:02 G	34784468.82	34784468.96	34784469.10	0.0082	0.0005
Mercury	90524-10-12 12:29 G	34784556.88	34784557.02	34784557.15	0.0082	0.0025
Mercury	90525-01-08 13:26 G	34784644.96	34784645.06	34784645.19	0.0082	0.0045
Mercury	90525-04-06 15:07 G	34784733.05	34784733.13	34784733.22	0.0082	0.0065
Earth	90526-11-05 07:26 G	34785310.58	34785310.81	34785311.07	0.0081	0.0031

Moon	90526-11-05 07:55 G	34785310.58	34785310.83	34785311.09	0.0081	0.0027 *
Mars	90527-05-07 07:12 G	34785493.53	34785493.80	34785494.13	0.0081	0.0041
Venus	90531-12-17 03:07 G	34787178.44	34787178.63	34787178.86	0.0078	0.0028
Venus	90532-07-29 13:12 G	34787403.89	34787404.05	34787404.25	0.0078	0.0046
Mercury	90677-08-16 14:38 G	34840382.03	34840382.11	34840382.22	0.0061	0.0052
Mercury	90677-11-12 16:05 G	34840470.04	34840470.17	34840470.30	0.0061	0.0042
Mercury	90678-02-08 16:48 G	34840558.06	34840558.20	34840558.37	0.0061	0.0032
Mercury	90678-05-07 18:14 G	34840646.09	34840646.26	34840646.43	0.0062	0.0021
Mercury	90678-08-03 19:12 G	34840734.13	34840734.30	34840734.48	0.0062	0.0011
Mercury	90678-10-30 20:24 G	34840822.17	34840822.35	34840822.53	0.0062	0.0001
Mercury	90679-01-26 21:22 G	34840910.22	34840910.39	34840910.57	0.0062	0.0011
Mercury	90679-04-24 22:19 G	34840998.28	34840998.43	34840998.61	0.0062	0.0022
Mercury	90679-07-21 23:31 G	34841086.34	34841086.48	34841086.64	0.0062	0.0032
Mercury	90679-10-18 00:29 G	34841174.41	34841174.52	34841174.66	0.0062	0.0043
Mercury	90680-01-14 01:41 G	34841262.49	34841262.57	34841262.67	0.0062	0.0053
Earth	90682-05-08 18:58 G	34842108.08	34842108.29	34842108.54	0.0063	0.0026
Moon	90682-05-08 22:19 G	34842108.21	34842108.43	34842108.67	0.0063	0.0023 *
Moon	90683-05-10 01:41 G	34842474.43	34842474.57	34842474.75	0.0063	0.0049
Earth	90683-05-10 05:02 G	34842474.59	34842474.71	34842474.88	0.0063	0.0052 *
Venus	90690-05-15 20:10 G	34845037.23	34845037.34	34845037.48	0.0066	0.0053
Venus	90690-12-27 00:29 G	34845262.31	34845262.52	34845262.74	0.0066	0.0012
Venus	90691-08-09 04:19 G	34845487.51	34845487.68	34845487.90	0.0066	0.0031
Mercury	90770-03-17 18:58 G	34874197.22	34874197.29	34874197.39	0.0083	0.0065
Mercury	90770-06-13 20:24 G	34874285.24	34874285.35	34874285.48	0.0083	0.0045
Mercury	90770-09-09 21:50 G	34874373.28	34874373.41	34874373.55	0.0083	0.0024
Mercury	90770-12-06 23:17 G	34874461.33	34874461.47	34874461.61	0.0083	0.0004
Mercury	90771-03-05 00:29 G	34874549.39	34874549.52	34874549.67	0.0082	0.0016
Mercury	90771-06-01 01:41 G	34874637.46	34874637.57	34874637.71	0.0082	0.0037
Mercury	90771-08-28 03:07 G	34874725.54	34874725.63	34874725.74	0.0082	0.0056
Mercury	90771-11-24 04:19 G	34874813.64	34874813.68	34874813.75	0.0082	0.0076



Moon	90772-11-07 01:41 G	34875162.46	34875162.57	34875162.73	0.0082	0.0069
Earth	90772-11-07 05:17 G	34875162.58	34875162.72	34875162.88	0.0082	0.0066 *
Mars	90773-09-27 13:55 G	34875486.77	34875487.08	34875487.43	0.0081	0.0020
Venus	90778-08-29 07:55 G	34877283.61	34877283.83	34877284.06	0.0078	0.0006
Venus	90779-04-11 17:17 G	34877509.14	34877509.22	34877509.37	0.0078	0.0067
Mercury	90924-01-07 02:24 G	34930374.52	34930374.60	34930374.71	0.0061	0.0052
Mercury	90924-04-04 03:22 G	34930462.52	34930462.64	34930462.79	0.0061	0.0042
Mercury	90924-07-01 04:48 G	34930550.55	34930550.70	34930550.86	0.0061	0.0031
Mercury	90924-09-27 05:46 G	34930638.58	34930638.74	34930638.92	0.0062	0.0020
Mercury	90924-12-24 06:58 G	34930726.62	34930726.79	34930726.97	0.0062	0.0010
Mercury	90925-03-22 08:10 G	34930814.66	34930814.84	34930815.02	0.0062	0.0001
Mercury	90925-06-18 09:07 G	34930902.71	34930902.88	34930903.06	0.0062	0.0011
Mercury	90925-09-14 10:05 G	34930990.76	34930990.92	34930991.10	0.0062	0.0022
Mercury	90925-12-11 11:02 G	34931078.83	34931078.96	34931079.13	0.0062	0.0033
Mercury	90926-03-09 12:14 G	34931166.90	34931167.01	34931167.15	0.0062	0.0043
Mercury	90926-06-05 13:12 G	34931254.98	34931255.05	34931255.16	0.0062	0.0054
Moon	90928-05-11 07:26 G	34931960.77	34931960.81	34931960.93	0.0063	0.0060
Earth	90929-05-12 17:02 G	34932326.97	34932327.21	34932327.47	0.0063	0.0014
Moon	90929-05-12 18:29 G	34932327.04	34932327.27	34932327.53	0.0063	0.0011 *
Venus	90937-01-26 00:58 G	34935142.36	34935142.54	34935142.73	0.0066	0.0035
Venus	90937-09-08 05:02 G	34935367.50	34935367.71	34935367.94	0.0066	0.0007
Venus	90938-04-21 09:07 G	34935592.75	34935592.88	34935593.04	0.0066	0.0049

# 92ND MILLENNIUM CE

This is a list of transits visible from Pluto in the 92nd millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	91016-08-07 08:24	G	34964189.77	34964189.85	34964189.94	0.0083	0.0064	
Mercury	91016-11-03 09:50	G	34964277.79	34964277.91	34964278.03	0.0083	0.0044	
Mercury	91017-01-30 11:02	G	34964365.83	34964365.96	34964366.10	0.0083	0.0024	
Mercury	91017-04-28 12:29	G	34964453.88	34964454.02	34964454.17	0.0083	0.0004	
Mercury	91017-07-25 13:55	G	34964541.94	34964542.08	34964542.22	0.0082	0.0017	
Mercury	91017-10-21 15:07	G	34964630.01	34964630.13	34964630.26	0.0082	0.0037	
Mercury	91018-01-17 16:34	G	34964718.09	34964718.19	34964718.29	0.0082	0.0056	
Mercury	91018-04-15 17:46	G	34964806.20	34964806.24	34964806.30	0.0082	0.0076	
Moon	91019-11-12 12:43	G	34965381.78	34965382.03	34965382.28	0.0081	0.0030	
Earth	91019-11-12 16:19	G	34965381.94	34965382.18	34965382.43	0.0081	0.0031	*
Mars	91020-02-19 08:10	G	34965480.54	34965480.84	34965481.15	0.0081	0.0037	
Venus	91024-09-28 04:48	G	34967163.53	34967163.70	34967163.90	0.0079	0.0046	
Venus	91025-05-11 15:07	G	34967388.93	34967389.13	34967389.35	0.0078	0.0029	
Mercury	91170-03-02 13:55	G	35020279.02	35020279.08	35020279.17	0.0061	0.0055	
Mercury	91170-05-29 14:53	G	35020367.02	35020367.12	35020367.26	0.0061	0.0045	
Mercury	91170-08-25 16:19	G	35020455.04	35020455.18	35020455.34	0.0061	0.0035	
Mercury	91170-11-21 17:31	G	35020543.07	35020543.23	35020543.40	0.0061	0.0024	
Mercury	91171-02-17 18:29	G	35020631.10	35020631.27	35020631.46	0.0062	0.0014	
Mercury	91171-05-16 19:55	G	35020719.15	35020719.33	35020719.51	0.0062	0.0003	
Mercury	91171-08-12 20:53	G	35020807.20	35020807.37	35020807.55	0.0062	0.0008	
Mercury	91171-11-08 21:50	G	35020895.25	35020895.41	35020895.59	0.0062	0.0019	
Mercury	91172-02-04 23:02	G	35020983.31	35020983.46	35020983.63	0.0062	0.0029	
Mercury	91172-05-02 23:46	G	35021071.38	35021071.49	35021071.65	0.0062	0.0040	
Mercury	91172-07-30 01:12	G	35021159.46	35021159.55	35021159.66	0.0062	0.0050	
Mercury	91172-10-26 02:10	G	35021247.58	35021247.59	35021247.64	0.0062	0.0061	
Earth	91175-05-16 09:36	G	35022179.65	35022179.90	35022180.15	0.0063	0.0013	
Moon	91175-05-16 12:14	G	35022179.76	35022180.01	35022180.26	0.0063	0.0016	*

Venus	91183-02-26 03:22 G	35025022.52	35025022.64	35025022.81	0.0066	0.0050
Venus	91183-10-09 08:10 G	35025247.63	35025247.84	35025248.06	0.0066	0.0008
Venus	91184-05-21 12:00 G	35025472.84	35025473.00	35025473.21	0.0066	0.0035
Mercury	91262-09-30 20:53 G	35054094.33	35054094.37	35054094.44	0.0083	0.0076
Mercury	91262-12-27 22:19 G	35054182.34	35054182.43	35054182.55	0.0083	0.0056
Mercury	91263-03-26 00:00 G	35054270.37	35054270.50	35054270.63	0.0083	0.0035
Mercury	91263-06-22 01:12 G	35054358.42	35054358.55	35054358.69	0.0083	0.0015
Mercury	91263-09-18 02:38 G	35054446.47	35054446.61	35054446.75	0.0083	0.0005
Mercury	91263-12-15 03:50 G	35054534.53	35054534.66	35054534.80	0.0082	0.0025
Mercury	91264-03-12 05:02 G	35054622.60	35054622.71	35054622.84	0.0082	0.0045
Mercury	91264-06-08 06:14 G	35054710.69	35054710.76	35054710.86	0.0082	0.0065
Earth	91265-11-13 23:46 G	35055234.26	35055234.49	35055234.75	0.0081	0.0031
Moon	91265-11-14 00:00 G	35055234.29	35055234.50	35055234.75	0.0081	0.0035 *
Venus	91270-10-28 04:19 G	35057043.62	35057043.68	35057043.76	0.0079	0.0074
Venus	91271-06-10 14:53 G	35057268.89	35057269.12	35057269.34	0.0078	0.0001
Venus	91272-01-22 00:29 G	35057494.46	35057494.52	35057494.61	0.0078	0.0074
Mercury	91416-04-26 01:41 G	35110183.53	35110183.57	35110183.66	0.0061	0.0058
Mercury	91416-07-23 03:07 G	35110271.52	35110271.63	35110271.76	0.0061	0.0047
Mercury	91416-10-19 04:05 G	35110359.54	35110359.67	35110359.83	0.0061	0.0037
Mercury	91417-01-15 05:31 G	35110447.57	35110447.73	35110447.90	0.0061	0.0026
Mercury	91417-04-13 06:29 G	35110535.60	35110535.77	35110535.95	0.0062	0.0015
Mercury	91417-07-10 07:41 G	35110623.65	35110623.82	35110624.01	0.0062	0.0005
Mercury	91417-10-06 08:53 G	35110711.69	35110711.87	35110712.05	0.0062	0.0006
Mercury	91418-01-02 09:50 G	35110799.75	35110799.91	35110800.09	0.0062	0.0017
Mercury	91418-03-31 11:02 G	35110887.81	35110887.96	35110888.13	0.0062	0.0027
Mercury	91418-06-27 12:00 G	35110975.87	35110976.00	35110976.15	0.0062	0.0038
Mercury	91418-09-23 12:58 G	35111063.95	35111064.04	35111064.17	0.0062	0.0049
Mercury	91418-12-20 14:24 G	35111152.06	35111152.10	35111152.16	0.0062	0.0059
Moon	91421-05-18 23:31 G	35112032.29	35112032.48	35112032.70	0.0063	0.0038
Earth	91421-05-19 02:38 G	35112032.43	35112032.61	35112032.84	0.0063	0.0037 *

Earth	91422-05-20 12:43 G	35112398.85	35112399.03	35112399.24	0.0063	0.0041
Moon	91422-05-20 16:34 G	35112399.00	35112399.19	35112399.38	0.0063	0.0042 *
Venus	91429-03-28 07:12 G	35114902.73	35114902.80	35114902.90	0.0065	0.0060
Venus	91429-11-08 11:46 G	35115127.78	35115127.99	35115128.20	0.0066	0.0018
Venus	91430-06-21 15:36 G	35115352.96	35115353.15	35115353.37	0.0066	0.0024
Mercury	91508-11-25 10:48 G	35143998.91	35143998.95	35143998.99	0.0083	0.0080
Mercury	91509-02-21 12:00 G	35144086.91	35144087.00	35144087.10	0.0083	0.0059
Mercury	91509-05-20 13:26 G	35144174.94	35144175.06	35144175.19	0.0083	0.0039
Mercury	91509-08-16 14:53 G	35144262.98	35144263.12	35144263.25	0.0083	0.0019
Mercury	91509-11-12 16:05 G	35144351.03	35144351.17	35144351.32	0.0083	0.0003
Mercury	91510-02-08 17:17 G	35144439.09	35144439.22	35144439.37	0.0082	0.0022
Mercury	91510-05-07 18:43 G	35144527.16	35144527.28	35144527.41	0.0082	0.0041
Mercury	91510-08-03 19:55 G	35144615.25	35144615.33	35144615.43	0.0082	0.0061
Mercury	91510-10-30 21:07 G	35144703.37	35144703.38	35144703.42	0.0082	0.0081
Earth	91511-11-18 12:29 G	35145086.94	35145087.02	35145087.13	0.0082	0.0076
Moon	91511-11-18 16:05 G	35145087.13	35145087.17	35145087.23	0.0082	0.0080 *
Venus	91517-07-11 17:02 G	35147149.00	35147149.21	35147149.44	0.0079	0.0016
Venus	91518-02-22 02:38 G	35147374.49	35147374.61	35147374.79	0.0078	0.0059
Mercury	91662-06-19 15:07 G	35200088.05	35200088.13	35200088.23	0.0061	0.0053
Mercury	91662-09-15 16:05 G	35200176.06	35200176.17	35200176.32	0.0061	0.0043
Mercury	91662-12-12 17:31 G	35200264.08	35200264.23	35200264.39	0.0061	0.0032
Mercury	91663-03-10 18:29 G	35200352.11	35200352.27	35200352.45	0.0061	0.0021
Mercury	91663-06-06 19:41 G	35200440.15	35200440.32	35200440.50	0.0062	0.0011
Mercury	91663-09-02 20:53 G	35200528.19	35200528.37	35200528.55	0.0062	0.0001
Mercury	91663-11-29 21:50 G	35200616.24	35200616.41	35200616.60	0.0062	0.0011
Mercury	91664-02-25 23:02 G	35200704.30	35200704.46	35200704.64	0.0062	0.0021
Mercury	91664-05-24 00:00 G	35200792.36	35200792.50	35200792.67	0.0062	0.0032
Mercury	91664-08-20 01:26 G	35200880.43	35200880.56	35200880.69	0.0062	0.0042
Mercury	91664-11-16 02:10 G	35200968.52	35200968.59	35200968.70	0.0062	0.0053
Moon	91667-05-21 22:34 G	35201885.32	35201885.44	35201885.62	0.0063	0.0050

Earth	91667-05-22 00:00 G	35201885.35	35201885.50	35201885.67	0.0063	0.0049	*
Mars	91668-01-10 19:12 G	35202119.02	35202119.30	35202119.59	0.0063	0.0012	
Moon	91668-05-22 08:38 G	35202251.64	35202251.86	35202252.12	0.0063	0.0027	
Earth	91668-05-22 10:19 G	35202251.70	35202251.93	35202252.16	0.0063	0.0027	*
Venus	91675-04-27 13:41 G	35204783.01	35204783.07	35204783.17	0.0065	0.0061	
Venus	91675-12-08 18:14 G	35205008.05	35205008.26	35205008.47	0.0066	0.0019	
Venus	91676-07-20 22:19 G	35205233.23	35205233.43	35205233.64	0.0066	0.0023	
Venus	91677-03-03 02:24 G	35205458.60	35205458.60	35205458.64	0.0066	0.0066	
Mercury	91755-01-19 01:12 G	35233903.49	35233903.55	35233903.61	0.0083	0.0074	
Mercury	91755-04-17 02:24 G	35233991.50	35233991.60	35233991.71	0.0083	0.0054	
Mercury	91755-07-14 03:50 G	35234079.54	35234079.66	35234079.79	0.0083	0.0034	
Mercury	91755-10-10 05:17 G	35234167.58	35234167.72	35234167.86	0.0083	0.0014	
Mercury	91756-01-06 06:29 G	35234255.63	35234255.77	35234255.91	0.0083	0.0006	
Mercury	91756-04-03 07:41 G	35234343.70	35234343.82	35234343.96	0.0082	0.0027	
Mercury	91756-06-30 08:53 G	35234431.77	35234431.87	35234432.00	0.0082	0.0047	
Mercury	91756-09-26 10:05 G	35234519.86	35234519.92	35234520.02	0.0082	0.0067	
Earth	91758-11-22 14:10 G	35235306.97	35235307.09	35235307.24	0.0081	0.0069	
Moon	91758-11-22 17:17 G	35235307.15	35235307.22	35235307.35	0.0081	0.0074	*
Venus	91763-08-10 22:34 G	35237029.23	35237029.44	35237029.66	0.0079	0.0020	
Venus	91764-03-23 08:10 G	35237254.70	35237254.84	35237255.02	0.0078	0.0054	
Mercury	91908-05-18 03:22 G	35289904.59	35289904.64	35289904.71	0.0061	0.0058	
Mercury	91908-08-14 04:19 G	35289992.58	35289992.68	35289992.81	0.0061	0.0047	
Mercury	91908-11-10 05:46 G	35290080.60	35290080.74	35290080.88	0.0061	0.0037	
Mercury	91909-02-06 06:29 G	35290168.62	35290168.77	35290168.95	0.0061	0.0027	
Mercury	91909-05-05 07:55 G	35290256.66	35290256.83	35290257.01	0.0061	0.0016	
Mercury	91909-08-01 09:07 G	35290344.70	35290344.88	35290345.06	0.0062	0.0005	
Mercury	91909-10-28 10:05 G	35290432.75	35290432.92	35290433.11	0.0062	0.0006	
Mercury	91910-01-24 11:17 G	35290520.80	35290520.97	35290521.15	0.0062	0.0016	
Mercury	91910-04-22 12:14 G	35290608.86	35290609.01	35290609.18	0.0062	0.0027	
Mercury	91910-07-19 13:26 G	35290696.92	35290697.06	35290697.21	0.0062	0.0037	

Mercury	91910-10-15 14:24 G	35290785.00	35290785.10	35290785.23	0.0062	0.0048
Mercury	91911-01-11 15:22 G	35290873.11	35290873.14	35290873.22	0.0062	0.0059
Earth	91913-05-25 21:22 G	35291738.36	35291738.39	35291738.49	0.0063	0.0061
Moon	91913-05-26 00:58 G	35291738.49	35291738.54	35291738.66	0.0063	0.0060 *
Moon	91914-05-27 05:17 G	35292104.48	35292104.72	35292104.97	0.0063	0.0014
Earth	91914-05-27 07:55 G	35292104.60	35292104.83	35292105.09	0.0063	0.0016 *
Mars	91914-06-06 00:29 G	35292114.32	35292114.52	35292114.75	0.0063	0.0042
Venus	91921-05-28 20:24 G	35294663.29	35294663.35	35294663.46	0.0065	0.0061
Venus	91922-01-09 00:43 G	35294888.34	35294888.53	35294888.76	0.0066	0.0019
Venus	91922-08-22 05:02 G	35295113.52	35295113.71	35295113.93	0.0066	0.0024

# 93RD MILLENNIUM CE

This is a list of transits visible from Pluto in the 93rd millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	92001-03-14 15:50 G	35323808.09	35323808.16	35323808.26	0.0083	0.0065		
Mercury	92001-06-10 17:17 G	35323896.11	35323896.22	35323896.34	0.0083	0.0045		
Mercury	92001-09-06 18:43 G	35323984.15	35323984.28	35323984.42	0.0083	0.0025		
Mercury	92001-12-03 20:10 G	35324072.20	35324072.34	35324072.48	0.0083	0.0005		
Mercury	92002-03-01 21:22 G	35324160.25	35324160.39	35324160.53	0.0083	0.0015		
Mercury	92002-05-28 22:34 G	35324248.32	35324248.44	35324248.57	0.0082	0.0036		
Mercury	92002-08-24 23:46 G	35324336.40	35324336.49	35324336.61	0.0082	0.0056		
Mercury	92002-11-21 00:58 G	35324424.50	35324424.54	35324424.61	0.0082	0.0076		

Earth	92004-11-25 10:05 G	35325159.74	35325159.92	35325160.14	0.0081	0.0053
Moon	92004-11-25 10:34 G	35325159.76	35325159.94	35325160.15	0.0081	0.0056 *
Venus	92009-09-10 05:31 G	35326909.52	35326909.73	35326909.96	0.0079	0.0016
Venus	92010-04-23 15:50 G	35327135.01	35327135.16	35327135.31	0.0078	0.0058
Mercury	92154-04-14 15:50 G	35379721.13	35379721.16	35379721.24	0.0061	0.0058
Mercury	92154-07-11 17:17 G	35379809.12	35379809.22	35379809.34	0.0061	0.0048
Mercury	92154-10-07 18:14 G	35379897.13	35379897.26	35379897.42	0.0061	0.0038
Mercury	92155-01-03 19:41 G	35379985.16	35379985.32	35379985.49	0.0061	0.0027
Mercury	92155-04-01 20:38 G	35380073.20	35380073.36	35380073.55	0.0061	0.0017
Mercury	92155-06-28 22:05 G	35380161.24	35380161.42	35380161.60	0.0062	0.0005
Mercury	92155-09-24 23:17 G	35380249.29	35380249.47	35380249.65	0.0062	0.0005
Mercury	92155-12-22 00:14 G	35380337.34	35380337.51	35380337.69	0.0062	0.0016
Mercury	92156-03-19 01:12 G	35380425.40	35380425.55	35380425.73	0.0062	0.0027
Mercury	92156-06-15 02:24 G	35380513.47	35380513.60	35380513.76	0.0062	0.0037
Mercury	92156-09-11 03:22 G	35380601.55	35380601.64	35380601.77	0.0062	0.0048
Mercury	92156-12-08 04:48 G	35380689.65	35380689.70	35380689.76	0.0062	0.0058
Moon	92159-05-28 21:36 G	35381591.37	35381591.40	35381591.49	0.0063	0.0061
Earth	92160-05-29 08:53 G	35381957.63	35381957.87	35381958.13	0.0063	0.0013
Moon	92160-05-29 11:31 G	35381957.74	35381957.98	35381958.24	0.0063	0.0010 *
Venus	92167-06-28 05:02 G	35384543.61	35384543.71	35384543.87	0.0066	0.0053
Venus	92168-02-08 09:36 G	35384768.70	35384768.90	35384769.13	0.0066	0.0011
Venus	92168-09-20 13:55 G	35384993.90	35384994.08	35384994.28	0.0066	0.0032
Mercury	92247-02-10 06:29 G	35413624.69	35413624.77	35413624.85	0.0083	0.0068
Mercury	92247-05-09 07:41 G	35413712.71	35413712.82	35413712.94	0.0083	0.0048
Mercury	92247-08-05 09:07 G	35413800.75	35413800.88	35413801.01	0.0083	0.0028
Mercury	92247-11-01 10:34 G	35413888.80	35413888.94	35413889.08	0.0083	0.0008
Mercury	92248-01-28 11:46 G	35413976.85	35413976.99	35413977.13	0.0083	0.0012
Mercury	92248-04-25 13:12 G	35414064.92	35414065.05	35414065.18	0.0083	0.0032
Mercury	92248-07-22 14:24 G	35414152.99	35414153.10	35414153.21	0.0082	0.0052
Mercury	92248-10-18 15:36 G	35414241.09	35414241.15	35414241.22	0.0082	0.0072

Mars	92250-03-21 13:26 G	35414759.90	35414760.06	35414760.27	0.0082	0.0069
Moon	92250-11-29 07:12 G	35415012.62	35415012.80	35415013.02	0.0081	0.0050
Earth	92250-11-29 11:02 G	35415012.77	35415012.96	35415013.19	0.0081	0.0049 *
Venus	92255-02-28 03:50 G	35416564.66	35416564.66	35416564.70	0.0079	0.0079
Venus	92255-10-11 14:53 G	35416789.90	35416790.12	35416790.34	0.0079	0.0003
Venus	92256-05-24 00:14 G	35417015.45	35417015.51	35417015.64	0.0078	0.0072
Mercury	92400-03-12 04:34 G	35469537.67	35469537.69	35469537.76	0.0061	0.0060
Mercury	92400-06-08 06:00 G	35469625.65	35469625.75	35469625.87	0.0061	0.0049
Mercury	92400-09-04 06:58 G	35469713.67	35469713.79	35469713.95	0.0061	0.0039
Mercury	92400-12-01 08:24 G	35469801.70	35469801.85	35469802.02	0.0061	0.0028
Mercury	92401-02-27 09:22 G	35469889.73	35469889.89	35469890.08	0.0061	0.0018
Mercury	92401-05-26 10:48 G	35469977.77	35469977.95	35469978.13	0.0062	0.0007
Mercury	92401-08-22 12:00 G	35470065.82	35470066.00	35470066.18	0.0062	0.0004
Mercury	92401-11-18 12:58 G	35470153.87	35470154.04	35470154.22	0.0062	0.0015
Mercury	92402-02-14 13:55 G	35470241.93	35470242.08	35470242.26	0.0062	0.0026
Mercury	92402-05-13 15:07 G	35470330.00	35470330.13	35470330.29	0.0062	0.0036
Mercury	92402-08-09 16:05 G	35470418.07	35470418.17	35470418.31	0.0062	0.0047
Mercury	92402-11-05 17:31 G	35470506.17	35470506.23	35470506.30	0.0062	0.0057
Earth	92406-06-02 09:22 G	35471810.64	35471810.89	35471811.15	0.0063	0.0009
Moon	92406-06-02 11:02 G	35471810.70	35471810.96	35471811.23	0.0063	0.0005 *
Venus	92413-07-28 13:55 G	35474423.93	35474424.08	35474424.25	0.0066	0.0045
Venus	92414-03-10 18:29 G	35474649.05	35474649.27	35474649.48	0.0066	0.0003
Venus	92414-10-21 22:34 G	35474874.27	35474874.44	35474874.62	0.0066	0.0039
Mercury	92493-01-06 20:38 G	35503441.30	35503441.36	35503441.43	0.0083	0.0072
Mercury	92493-04-04 21:50 G	35503529.31	35503529.41	35503529.53	0.0083	0.0053
Mercury	92493-07-01 23:17 G	35503617.35	35503617.47	35503617.60	0.0083	0.0032
Mercury	92493-09-28 00:43 G	35503705.39	35503705.53	35503705.67	0.0083	0.0012
Mercury	92493-12-25 01:55 G	35503793.44	35503793.58	35503793.72	0.0083	0.0008
Mercury	92494-03-23 03:22 G	35503881.51	35503881.64	35503881.77	0.0083	0.0028
Mercury	92494-06-19 04:34 G	35503969.58	35503969.69	35503969.81	0.0082	0.0048



Mercury	92494-09-15 05:46 G	35504057.67	35504057.74	35504057.83	0.0082	0.0068
Earth	92496-12-01 11:31 G	35504865.78	35504865.98	35504866.22	0.0081	0.0045
Moon	92496-12-01 12:58 G	35504865.84	35504866.04	35504866.26	0.0081	0.0045 *
Venus	92501-03-30 12:58 G	35506444.93	35506445.04	35506445.19	0.0079	0.0065
Venus	92501-11-10 23:46 G	35506670.27	35506670.49	35506670.71	0.0079	0.0011
Mercury	92646-02-07 18:43 G	35559354.21	35559354.28	35559354.37	0.0061	0.0055
Mercury	92646-05-06 19:41 G	35559442.21	35559442.32	35559442.47	0.0061	0.0044
Mercury	92646-08-02 21:07 G	35559530.24	35559530.38	35559530.54	0.0061	0.0034
Mercury	92646-10-29 22:05 G	35559618.27	35559618.42	35559618.60	0.0061	0.0024
Mercury	92647-01-25 23:31 G	35559706.30	35559706.48	35559706.66	0.0061	0.0013
Mercury	92647-04-24 00:43 G	35559794.35	35559794.53	35559794.71	0.0062	0.0002
Mercury	92647-07-21 01:41 G	35559882.40	35559882.57	35559882.76	0.0062	0.0009
Mercury	92647-10-17 02:38 G	35559970.45	35559970.61	35559970.80	0.0062	0.0020
Mercury	92648-01-13 03:50 G	35560058.51	35560058.66	35560058.83	0.0062	0.0030
Mercury	92648-04-10 04:48 G	35560146.58	35560146.70	35560146.86	0.0062	0.0041
Mercury	92648-07-07 06:14 G	35560234.67	35560234.76	35560234.87	0.0062	0.0051
Mercury	92648-10-03 07:26 G	35560322.81	35560322.81	35560322.83	0.0062	0.0062
Earth	92651-06-05 02:53 G	35561297.62	35561297.62	35561297.67	0.0063	0.0063
Moon	92651-06-05 05:02 G	35561297.65	35561297.71	35561297.81	0.0063	0.0059 *
Mars	92651-09-25 23:31 G	35561410.21	35561410.48	35561410.77	0.0063	0.0016
Moon	92652-06-05 09:50 G	35561663.66	35561663.91	35561664.17	0.0063	0.0010
Earth	92652-06-05 13:26 G	35561663.81	35561664.06	35561664.31	0.0063	0.0013 *
Venus	92659-08-29 00:29 G	35564304.34	35564304.52	35564304.73	0.0066	0.0030
Venus	92660-04-10 05:02 G	35564529.50	35564529.71	35564529.93	0.0066	0.0013
Venus	92660-11-21 09:22 G	35564754.78	35564754.89	35564755.01	0.0066	0.0055
Mercury	92738-12-06 11:31 G	35593257.91	35593257.98	35593258.06	0.0083	0.0069
Mercury	92739-03-04 12:58 G	35593345.93	35593346.04	35593346.16	0.0083	0.0049
Mercury	92739-05-31 14:10 G	35593433.97	35593434.09	35593434.23	0.0083	0.0029
Mercury	92739-08-27 15:36 G	35593522.02	35593522.15	35593522.29	0.0083	0.0009
Mercury	92739-11-23 17:02 G	35593610.07	35593610.21	35593610.35	0.0083	0.0011

Mercury	92740-02-19 18:14 G	35593698.13	35593698.26	35593698.39	0.0083	0.0031
Mercury	92740-05-17 19:41 G	35593786.21	35593786.32	35593786.43	0.0082	0.0051
Mercury	92740-08-13 20:53 G	35593874.30	35593874.37	35593874.44	0.0082	0.0071
Earth	92742-12-06 15:50 G	35594719.00	35594719.16	35594719.38	0.0081	0.0056
Moon	92742-12-06 19:41 G	35594719.13	35594719.32	35594719.53	0.0081	0.0053 *
Venus	92747-05-01 00:58 G	35596325.36	35596325.54	35596325.75	0.0079	0.0041
Venus	92747-12-12 11:17 G	35596550.78	35596550.97	35596551.18	0.0078	0.0035
Mercury	92891-10-09 07:41 G	35649082.80	35649082.82	35649082.84	0.0061	0.0061
Mercury	92892-01-05 08:24 G	35649170.76	35649170.85	35649170.97	0.0061	0.0051
Mercury	92892-04-02 09:22 G	35649258.78	35649258.89	35649259.05	0.0061	0.0041
Mercury	92892-06-29 10:48 G	35649346.80	35649346.95	35649347.12	0.0061	0.0030
Mercury	92892-09-25 12:14 G	35649434.84	35649435.01	35649435.18	0.0061	0.0019
Mercury	92892-12-22 13:12 G	35649522.88	35649523.05	35649523.24	0.0061	0.0009
Mercury	92893-03-20 14:24 G	35649610.92	35649611.10	35649611.29	0.0062	0.0003
Mercury	92893-06-16 15:36 G	35649698.98	35649699.15	35649699.33	0.0062	0.0013
Mercury	92893-09-12 16:34 G	35649787.03	35649787.19	35649787.37	0.0062	0.0024
Mercury	92893-12-09 17:46 G	35649875.10	35649875.24	35649875.40	0.0062	0.0034
Mercury	92894-03-07 18:43 G	35649963.17	35649963.28	35649963.42	0.0062	0.0045
Mercury	92894-06-03 20:10 G	35650051.27	35650051.34	35650051.42	0.0062	0.0055
Earth	92897-06-07 06:58 G	35651150.70	35651150.79	35651150.89	0.0063	0.0058
Moon	92897-06-07 08:53 G	35651150.78	35651150.87	35651151.03	0.0063	0.0055 *
Earth	92898-06-08 17:02 G	35651516.97	35651517.21	35651517.46	0.0063	0.0018
Moon	92898-06-08 16:48 G	35651516.97	35651517.20	35651517.45	0.0063	0.0015 *
Venus	92905-02-15 07:12 G	35653959.70	35653959.80	35653959.92	0.0065	0.0056
Venus	92905-09-28 11:31 G	35654184.77	35654184.98	35654185.20	0.0066	0.0014
Venus	92906-05-11 15:50 G	35654409.97	35654410.16	35654410.36	0.0066	0.0028
Mercury	92984-11-02 02:38 G	35683074.54	35683074.61	35683074.71	0.0083	0.0066
Mercury	92985-01-29 04:05 G	35683162.56	35683162.67	35683162.79	0.0083	0.0045
Mercury	92985-04-27 05:31 G	35683250.60	35683250.73	35683250.86	0.0083	0.0025
Mercury	92985-07-24 06:43 G	35683338.65	35683338.78	35683338.92	0.0083	0.0006

Mercury	92985-10-20 08:10 G	35683426.70	35683426.84	35683426.98	0.0083	0.0015
Mercury	92986-01-16 09:22 G	35683514.77	35683514.89	35683515.02	0.0083	0.0035
Mercury	92986-04-14 10:34 G	35683602.84	35683602.94	35683603.05	0.0083	0.0055
Mercury	92986-07-11 11:46 G	35683690.94	35683690.99	35683691.06	0.0082	0.0075
Moon	92988-12-08 18:29 G	35684572.14	35684572.27	35684572.48	0.0081	0.0064
Earth	92988-12-08 21:22 G	35684572.26	35684572.39	35684572.56	0.0081	0.0066 *
Venus	92993-05-30 13:26 G	35686205.84	35686206.06	35686206.28	0.0079	0.0015
Venus	92994-01-10 23:17 G	35686431.34	35686431.47	35686431.63	0.0078	0.0060

# 94TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 94th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	93137-09-06 22:05 G	35738899.33	35738899.42	35738899.52	0.0061	0.0051		
Mercury	93137-12-03 23:02 G	35738987.34	35738987.46	35738987.61	0.0061	0.0041		
Mercury	93138-03-02 00:29 G	35739075.37	35739075.52	35739075.68	0.0061	0.0031		
Mercury	93138-05-29 01:26 G	35739163.40	35739163.56	35739163.74	0.0061	0.0020		
Mercury	93138-08-25 02:53 G	35739251.44	35739251.62	35739251.80	0.0061	0.0009		
Mercury	93138-11-21 04:05 G	35739339.48	35739339.67	35739339.85	0.0062	0.0001		
Mercury	93139-02-17 05:02 G	35739427.54	35739427.71	35739427.90	0.0062	0.0012		
Mercury	93139-05-16 06:00 G	35739515.59	35739515.75	35739515.93	0.0062	0.0023		
Mercury	93139-08-12 07:26 G	35739603.66	35739603.81	35739603.97	0.0062	0.0033		
Mercury	93139-11-08 08:10 G	35739691.73	35739691.84	35739691.99	0.0062	0.0044		

Mercury	93140-02-04 09:50 G	35739779.83	35739779.91	35739779.99	0.0062	0.0054
Mars	93142-08-23 23:02 G	35740711.30	35740711.46	35740711.67	0.0063	0.0048
Moon	93143-06-12 11:17 G	35741003.79	35741003.97	35741004.17	0.0063	0.0042
Earth	93143-06-12 13:55 G	35741003.93	35741004.08	35741004.29	0.0063	0.0045 *
Earth	93144-06-13 00:14 G	35741370.31	35741370.51	35741370.75	0.0063	0.0032
Moon	93144-06-13 04:05 G	35741370.46	35741370.67	35741370.91	0.0063	0.0030 *
Venus	93151-03-18 20:24 G	35743840.17	35743840.35	35743840.55	0.0066	0.0032
Venus	93151-10-30 00:43 G	35744065.32	35744065.53	35744065.75	0.0066	0.0011
Venus	93152-06-11 04:48 G	35744290.59	35744290.70	35744290.84	0.0066	0.0053
Mercury	93230-07-04 17:31 G	35772803.17	35772803.23	35772803.32	0.0083	0.0071
Mercury	93230-09-30 18:58 G	35772891.19	35772891.29	35772891.41	0.0083	0.0050
Mercury	93230-12-27 20:24 G	35772979.23	35772979.35	35772979.49	0.0083	0.0030
Mercury	93231-03-25 21:50 G	35773067.27	35773067.41	35773067.55	0.0083	0.0010
Mercury	93231-06-21 23:02 G	35773155.33	35773155.46	35773155.60	0.0083	0.0011
Mercury	93231-09-18 00:29 G	35773243.39	35773243.52	35773243.65	0.0083	0.0030
Mercury	93231-12-15 01:41 G	35773331.46	35773331.57	35773331.68	0.0083	0.0050
Mercury	93232-03-12 02:53 G	35773419.55	35773419.62	35773419.70	0.0082	0.0070
Mars	93233-12-01 07:41 G	35774048.67	35774048.82	35774049.05	0.0082	0.0069
Earth	93233-12-11 01:41 G	35774058.46	35774058.57	35774058.72	0.0082	0.0071
Moon	93233-12-11 04:48 G	35774058.56	35774058.70	35774058.86	0.0082	0.0067 *
Venus	93238-11-17 18:00 G	35775861.09	35775861.25	35775861.44	0.0079	0.0050
Venus	93239-07-01 04:34 G	35776086.48	35776086.69	35776086.90	0.0078	0.0026
Mercury	93383-05-08 11:02 G	35828627.90	35828627.96	35828628.07	0.0061	0.0054
Mercury	93383-08-04 12:29 G	35828715.90	35828716.02	35828716.16	0.0061	0.0044
Mercury	93383-10-31 13:26 G	35828803.93	35828804.06	35828804.23	0.0061	0.0034
Mercury	93384-01-27 14:53 G	35828891.96	35828892.12	35828892.30	0.0061	0.0023
Mercury	93384-04-24 16:05 G	35828980.00	35828980.17	35828980.35	0.0061	0.0012
Mercury	93384-07-21 17:17 G	35829068.04	35829068.22	35829068.41	0.0061	0.0002
Mercury	93384-10-17 18:14 G	35829156.09	35829156.26	35829156.45	0.0062	0.0010
Mercury	93385-01-13 19:26 G	35829244.15	35829244.31	35829244.49	0.0062	0.0020

Mercury	93385-04-11 20:24 G	35829332.21	35829332.35	35829332.53	0.0062	0.0031
Mercury	93385-07-08 21:50 G	35829420.28	35829420.41	35829420.55	0.0062	0.0041
Mercury	93385-10-04 22:48 G	35829508.37	35829508.45	35829508.56	0.0062	0.0052
Mars	93389-01-15 18:00 G	35830707.07	35830707.25	35830707.50	0.0063	0.0042
Moon	93389-06-14 19:12 G	35830857.11	35830857.30	35830857.53	0.0063	0.0033
Earth	93389-06-14 20:53 G	35830857.16	35830857.37	35830857.59	0.0063	0.0034 *
Moon	93390-06-16 05:46 G	35831223.56	35831223.74	35831223.96	0.0063	0.0041
Earth	93390-06-16 07:26 G	35831223.62	35831223.81	35831224.00	0.0063	0.0042 *
Venus	93396-09-04 04:34 G	35833495.57	35833495.69	35833495.83	0.0065	0.0052
Venus	93397-04-17 08:53 G	35833720.66	35833720.87	35833721.09	0.0066	0.0010
Venus	93397-11-28 12:43 G	35833945.86	35833946.03	35833946.24	0.0066	0.0033
Mercury	93476-03-05 08:10 G	35862531.81	35862531.84	35862531.90	0.0083	0.0079
Mercury	93476-06-01 09:36 G	35862619.81	35862619.90	35862620.01	0.0083	0.0058
Mercury	93476-08-28 11:02 G	35862707.84	35862707.96	35862708.09	0.0083	0.0038
Mercury	93476-11-24 12:29 G	35862795.88	35862796.02	35862796.16	0.0083	0.0018
Mercury	93477-02-20 13:41 G	35862883.93	35862884.07	35862884.21	0.0083	0.0003
Mercury	93477-05-19 15:07 G	35862971.99	35862972.13	35862972.26	0.0083	0.0022
Mercury	93477-08-15 16:19 G	35863060.06	35863060.18	35863060.30	0.0083	0.0042
Mercury	93477-11-11 17:31 G	35863148.15	35863148.23	35863148.33	0.0082	0.0062
Mercury	93478-02-07 18:43 G	35863236.27	35863236.28	35863236.31	0.0082	0.0081
Moon	93479-12-15 09:22 G	35863911.67	35863911.89	35863912.15	0.0081	0.0039
Earth	93479-12-15 12:00 G	35863911.80	35863912.00	35863912.25	0.0081	0.0043 *
Venus	93484-12-18 09:07 G	35865741.66	35865741.88	35865742.10	0.0079	0.0012
Venus	93485-07-31 18:43 G	35865967.17	35865967.28	35865967.44	0.0078	0.0064
Mercury	93629-01-07 00:58 G	35918356.48	35918356.54	35918356.66	0.0061	0.0054
Mercury	93629-04-05 02:38 G	35918444.48	35918444.61	35918444.75	0.0061	0.0043
Mercury	93629-07-02 03:36 G	35918532.51	35918532.65	35918532.82	0.0061	0.0032
Mercury	93629-09-28 05:02 G	35918620.54	35918620.71	35918620.88	0.0061	0.0022
Mercury	93629-12-25 06:00 G	35918708.58	35918708.75	35918708.94	0.0061	0.0011
Mercury	93630-03-23 07:26 G	35918796.62	35918796.81	35918796.99	0.0061	0.0001

Mercury	93630-06-19 08:10 G	35918884.67	35918884.84	35918885.04	0.0062	0.0011
Mercury	93630-09-15 09:22 G	35918972.73	35918972.89	35918973.08	0.0062	0.0021
Mercury	93630-12-12 10:19 G	35919060.79	35919060.93	35919061.11	0.0062	0.0032
Mercury	93631-03-10 11:46 G	35919148.87	35919148.99	35919149.13	0.0062	0.0042
Mercury	93631-06-06 12:29 G	35919236.95	35919237.02	35919237.14	0.0062	0.0053
Earth	93635-06-19 05:02 G	35920710.48	35920710.71	35920710.97	0.0063	0.0018
Moon	93635-06-19 08:38 G	35920710.62	35920710.86	35920711.11	0.0063	0.0017 *
Moon	93636-06-19 11:46 G	35921076.94	35921076.99	35921077.11	0.0063	0.0060
Earth	93636-06-19 15:07 G	35921077.06	35921077.13	35921077.26	0.0063	0.0059 *
Venus	93642-10-05 18:29 G	35923376.08	35923376.27	35923376.49	0.0066	0.0025
Venus	93643-05-18 22:48 G	35923601.25	35923601.45	35923601.67	0.0066	0.0018
Venus	93643-12-30 02:24 G	35923826.55	35923826.60	35923826.72	0.0066	0.0062
Mercury	93721-11-04 23:46 G	35952260.46	35952260.49	35952260.54	0.0083	0.0079
Mercury	93722-02-01 01:12 G	35952348.46	35952348.55	35952348.65	0.0083	0.0058
Mercury	93722-04-30 02:24 G	35952436.48	35952436.60	35952436.73	0.0083	0.0038
Mercury	93722-07-27 03:50 G	35952524.53	35952524.66	35952524.80	0.0083	0.0018
Mercury	93722-10-23 05:17 G	35952612.58	35952612.72	35952612.86	0.0083	0.0003
Mercury	93723-01-19 06:29 G	35952700.64	35952700.77	35952700.91	0.0083	0.0021
Mercury	93723-04-17 07:26 G	35952788.70	35952788.81	35952788.95	0.0083	0.0042
Mercury	93723-07-14 09:07 G	35952876.79	35952876.88	35952876.97	0.0083	0.0061
Mercury	93723-10-10 10:05 G	35952964.91	35952964.92	35952964.96	0.0082	0.0081
Moon	93725-12-19 00:58 G	35953765.29	35953765.54	35953765.80	0.0081	0.0005
Earth	93725-12-19 03:07 G	35953765.37	35953765.63	35953765.90	0.0081	0.0002 *
Venus	93730-06-07 16:05 G	35955396.99	35955397.17	35955397.38	0.0079	0.0039
Venus	93731-01-19 02:24 G	35955622.41	35955622.60	35955622.81	0.0078	0.0037
Mercury	93874-09-08 14:09 G	36008085.04	36008085.09	36008085.20	0.0061	0.0056
Mercury	93874-12-05 15:50 G	36008173.04	36008173.16	36008173.29	0.0061	0.0044
Mercury	93875-03-03 16:48 G	36008261.06	36008261.20	36008261.37	0.0061	0.0034
Mercury	93875-05-30 18:14 G	36008349.10	36008349.26	36008349.44	0.0061	0.0023
Mercury	93875-08-26 19:12 G	36008437.14	36008437.30	36008437.49	0.0061	0.0014

Mercury	93875-11-22 20:38 G	36008525.18	36008525.36	36008525.55	0.0061	0.0003
Mercury	93876-02-18 21:50 G	36008613.23	36008613.41	36008613.59	0.0061	0.0008
Mercury	93876-05-16 23:02 G	36008701.29	36008701.46	36008701.64	0.0062	0.0019
Mercury	93876-08-13 00:00 G	36008789.35	36008789.50	36008789.67	0.0062	0.0030
Mercury	93876-11-09 01:12 G	36008877.42	36008877.55	36008877.70	0.0062	0.0040
Mercury	93877-02-05 02:09 G	36008965.51	36008965.59	36008965.71	0.0062	0.0051
Mercury	93877-05-04 03:21 G	36009053.64	36009053.64	36009053.68	0.0062	0.0062
Mars	93879-12-15 02:53 G	36010008.34	36010008.62	36010008.91	0.0063	0.0006
Earth	93881-06-22 12:14 G	36010563.76	36010564.01	36010564.27	0.0063	0.0007
Moon	93881-06-22 12:29 G	36010563.76	36010564.02	36010564.28	0.0063	0.0008 *
Venus	93888-03-25 03:21 G	36013031.49	36013031.64	36013031.81	0.0065	0.0044
Venus	93888-11-05 07:41 G	36013256.60	36013256.82	36013257.04	0.0066	0.0002
Venus	93889-06-18 11:31 G	36013481.83	36013481.98	36013482.16	0.0066	0.0041
Mercury	93967-10-03 16:05 G	36042077.09	36042077.17	36042077.25	0.0083	0.0066
Mercury	93967-12-30 17:17 G	36042165.11	36042165.22	36042165.34	0.0083	0.0046
Mercury	93968-03-27 18:43 G	36042253.15	36042253.28	36042253.41	0.0083	0.0026
Mercury	93968-06-23 19:55 G	36042341.20	36042341.33	36042341.47	0.0083	0.0006
Mercury	93968-09-19 21:21 G	36042429.25	36042429.39	36042429.53	0.0083	0.0014
Mercury	93968-12-16 22:33 G	36042517.32	36042517.44	36042517.57	0.0083	0.0034
Mercury	93969-03-14 23:45 G	36042605.39	36042605.49	36042605.60	0.0083	0.0054
Mercury	93969-06-11 00:57 G	36042693.49	36042693.54	36042693.61	0.0083	0.0073
Earth	93971-12-23 13:12 G	36043618.82	36043619.05	36043619.31	0.0081	0.0028
Moon	93971-12-23 16:33 G	36043618.96	36043619.19	36043619.44	0.0081	0.0031 *
Venus	93975-11-25 19:55 G	36045052.31	36045052.33	36045052.41	0.0079	0.0077
Venus	93976-07-08 06:57 G	36045277.57	36045277.79	36045278.02	0.0079	0.0001
Venus	93977-02-18 16:33 G	36045503.16	36045503.19	36045503.28	0.0078	0.0076

# 95TH MILLENNIUM CE

**This is a list of transits visible from Pluto in the 95th millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	94120-05-10 04:19	G	36097813.62	36097813.68	36097813.78	0.0061	0.0055	
Mercury	94120-08-06 05:17	G	36097901.62	36097901.72	36097901.87	0.0061	0.0045	
Mercury	94120-11-02 06:57	G	36097989.64	36097989.79	36097989.95	0.0061	0.0033	
Mercury	94121-01-29 07:55	G	36098077.67	36098077.83	36098078.01	0.0061	0.0023	
Mercury	94121-04-27 09:21	G	36098165.71	36098165.89	36098166.07	0.0061	0.0012	
Mercury	94121-07-24 10:33	G	36098253.76	36098253.94	36098254.13	0.0061	0.0002	
Mercury	94121-10-20 11:45	G	36098341.81	36098341.99	36098342.17	0.0061	0.0009	
Mercury	94122-01-16 12:43	G	36098429.87	36098430.03	36098430.21	0.0062	0.0020	
Mercury	94122-04-14 13:55	G	36098517.93	36098518.08	36098518.25	0.0062	0.0030	
Mercury	94122-07-11 14:53	G	36098606.00	36098606.12	36098606.28	0.0062	0.0041	
Mercury	94122-10-07 15:50	G	36098694.09	36098694.16	36098694.29	0.0062	0.0052	
Moon	94127-06-26 17:17	G	36100416.98	36100417.22	36100417.49	0.0063	0.0008	
Earth	94127-06-26 21:07	G	36100417.12	36100417.38	36100417.63	0.0063	0.0009	*
Venus	94133-09-12 12:29	G	36102686.95	36102687.02	36102687.14	0.0065	0.0059	
Venus	94134-04-25 17:02	G	36102912.01	36102912.21	36102912.43	0.0066	0.0017	
Venus	94134-12-06 21:07	G	36103137.19	36103137.38	36103137.59	0.0066	0.0026	
Mercury	94213-06-04 07:26	G	36131805.73	36131805.81	36131805.89	0.0083	0.0067	
Mercury	94213-08-31 08:24	G	36131893.75	36131893.85	36131893.98	0.0083	0.0048	
Mercury	94213-11-27 09:50	G	36131981.79	36131981.91	36131982.05	0.0083	0.0027	
Mercury	94214-02-23 11:17	G	36132069.83	36132069.97	36132070.11	0.0083	0.0007	
Mercury	94214-05-22 12:43	G	36132157.89	36132158.03	36132158.16	0.0083	0.0013	
Mercury	94214-08-18 13:55	G	36132245.95	36132246.08	36132246.21	0.0083	0.0033	



Mercury	94214-11-14 14:53 G	36132334.03	36132334.12	36132334.24	0.0083	0.0053
Mercury	94215-02-10 16:33 G	36132422.12	36132422.19	36132422.25	0.0083	0.0072
Earth	94217-12-27 03:21 G	36133472.52	36133472.64	36133472.81	0.0081	0.0067
Moon	94217-12-27 04:19 G	36133472.58	36133472.68	36133472.85	0.0081	0.0070 *
Venus	94221-12-26 13:12 G	36134932.86	36134933.05	36134933.28	0.0079	0.0029
Venus	94222-08-08 23:31 G	36135158.32	36135158.48	36135158.67	0.0078	0.0048
Mercury	94366-01-09 17:45 G	36187542.19	36187542.24	36187542.33	0.0061	0.0056
Mercury	94366-04-07 18:43 G	36187630.18	36187630.28	36187630.42	0.0061	0.0046
Mercury	94366-07-04 20:09 G	36187718.20	36187718.34	36187718.50	0.0061	0.0036
Mercury	94366-09-30 21:21 G	36187806.23	36187806.39	36187806.57	0.0061	0.0025
Mercury	94366-12-27 22:48 G	36187894.27	36187894.45	36187894.63	0.0061	0.0015
Mercury	94367-03-25 23:45 G	36187982.31	36187982.49	36187982.68	0.0061	0.0005
Mercury	94367-06-22 00:57 G	36188070.36	36188070.54	36188070.73	0.0061	0.0007
Mercury	94367-09-18 01:55 G	36188158.42	36188158.58	36188158.77	0.0061	0.0018
Mercury	94367-12-15 03:07 G	36188246.48	36188246.63	36188246.81	0.0062	0.0028
Mercury	94368-03-12 04:05 G	36188334.55	36188334.67	36188334.84	0.0062	0.0039
Mercury	94368-06-08 05:31 G	36188422.63	36188422.73	36188422.85	0.0062	0.0049
Mercury	94368-09-04 06:29 G	36188510.75	36188510.77	36188510.84	0.0062	0.0060
Mars	94370-11-12 10:48 G	36189309.84	36189309.95	36189310.14	0.0062	0.0054
Moon	94372-06-28 16:33 G	36189904.09	36189904.19	36189904.36	0.0063	0.0054
Earth	94372-06-28 16:33 G	36189904.10	36189904.19	36189904.33	0.0063	0.0056 *
Earth	94373-06-30 03:07 G	36190270.40	36190270.63	36190270.89	0.0063	0.0020
Moon	94373-06-30 04:33 G	36190270.46	36190270.69	36190270.94	0.0063	0.0017 *
Venus	94379-10-14 01:12 G	36192567.39	36192567.55	36192567.75	0.0065	0.0037
Venus	94380-05-26 05:45 G	36192792.52	36192792.74	36192792.95	0.0066	0.0006
Venus	94381-01-06 09:07 G	36193017.76	36193017.88	36193018.05	0.0066	0.0049
Mercury	94459-02-02 21:36 G	36221534.36	36221534.40	36221534.47	0.0083	0.0077
Mercury	94459-05-01 23:02 G	36221622.37	36221622.46	36221622.57	0.0083	0.0056
Mercury	94459-07-29 00:29 G	36221710.40	36221710.52	36221710.65	0.0083	0.0036
Mercury	94459-10-25 01:55 G	36221798.44	36221798.58	36221798.72	0.0083	0.0016

Mercury	94460-01-21 03:07 G	36221886.50	36221886.63	36221886.77	0.0083	0.0005
Mercury	94460-04-18 04:19 G	36221974.56	36221974.68	36221974.82	0.0083	0.0024
Mercury	94460-07-15 05:31 G	36222062.62	36222062.73	36222062.86	0.0083	0.0044
Mercury	94460-10-11 06:57 G	36222150.71	36222150.79	36222150.88	0.0083	0.0063
Mercury	94461-01-07 08:24 G	36222238.85	36222238.85	36222238.85	0.0082	0.0082
Mars	94462-02-13 10:33 G	36222640.68	36222640.94	36222641.26	0.0082	0.0045
Earth	94462-12-28 05:45 G	36222958.66	36222958.74	36222958.85	0.0081	0.0076
Moon	94462-12-28 08:38 G	36222958.80	36222958.86	36222958.95	0.0081	0.0078 *
Venus	94467-06-14 17:31 G	36224588.13	36224588.23	36224588.36	0.0079	0.0068
Venus	94468-01-26 04:05 G	36224813.45	36224813.67	36224813.90	0.0079	0.0009
Mercury	94611-09-11 07:26 G	36277270.76	36277270.81	36277270.90	0.0061	0.0056
Mercury	94611-12-08 09:07 G	36277358.76	36277358.88	36277359.00	0.0061	0.0046
Mercury	94612-03-05 09:50 G	36277446.78	36277446.91	36277447.08	0.0061	0.0036
Mercury	94612-06-01 11:02 G	36277534.81	36277534.96	36277535.14	0.0061	0.0025
Mercury	94612-08-28 12:29 G	36277622.85	36277623.02	36277623.20	0.0061	0.0014
Mercury	94612-11-24 13:41 G	36277710.89	36277711.07	36277711.26	0.0061	0.0004
Mercury	94613-02-20 14:53 G	36277798.94	36277799.12	36277799.31	0.0061	0.0007
Mercury	94613-05-19 15:50 G	36277887.00	36277887.16	36277887.35	0.0061	0.0018
Mercury	94613-08-15 17:17 G	36277975.06	36277975.22	36277975.39	0.0062	0.0028
Mercury	94613-11-11 18:14 G	36278063.13	36278063.26	36278063.42	0.0062	0.0039
Mercury	94614-02-07 19:12 G	36278151.21	36278151.30	36278151.43	0.0062	0.0050
Mercury	94614-05-06 20:38 G	36278239.33	36278239.36	36278239.41	0.0062	0.0060
Mars	94617-04-07 09:36 G	36279305.70	36279305.90	36279306.14	0.0063	0.0040
Moon	94618-07-02 21:50 G	36279757.22	36279757.41	36279757.62	0.0063	0.0038
Earth	94618-07-03 00:43 G	36279757.37	36279757.53	36279757.75	0.0063	0.0042 *
Earth	94619-07-04 11:02 G	36280123.78	36280123.96	36280124.21	0.0063	0.0035
Moon	94619-07-04 14:38 G	36280123.89	36280124.11	36280124.34	0.0063	0.0031 *
Venus	94625-04-02 10:48 G	36282222.85	36282222.95	36282223.11	0.0065	0.0052
Venus	94625-11-13 15:21 G	36282447.93	36282448.14	36282448.36	0.0066	0.0010
Venus	94626-06-26 19:12 G	36282673.13	36282673.30	36282673.51	0.0066	0.0034

Mercury	94704-10-05 13:12 G	36311263.01	36311263.05	36311263.11	0.0084	0.0078
Mercury	94705-01-01 14:38 G	36311351.02	36311351.11	36311351.21	0.0083	0.0058
Mercury	94705-03-30 16:05 G	36311439.05	36311439.17	36311439.29	0.0083	0.0038
Mercury	94705-06-26 17:17 G	36311527.09	36311527.22	36311527.36	0.0083	0.0018
Mercury	94705-09-22 18:43 G	36311615.14	36311615.28	36311615.41	0.0083	0.0004
Mercury	94705-12-19 19:41 G	36311703.19	36311703.32	36311703.46	0.0083	0.0022
Mercury	94706-03-17 20:53 G	36311791.26	36311791.37	36311791.50	0.0083	0.0042
Mercury	94706-06-13 22:19 G	36311879.34	36311879.43	36311879.53	0.0083	0.0061
Mercury	94706-09-09 23:31 G	36311967.46	36311967.48	36311967.51	0.0083	0.0081
Earth	94709-01-01 19:26 G	36312812.10	36312812.31	36312812.56	0.0081	0.0037
Moon	94709-01-01 21:21 G	36312812.17	36312812.39	36312812.65	0.0081	0.0038 *
Venus	94713-07-16 10:33 G	36314468.73	36314468.94	36314469.16	0.0079	0.0020
Venus	94714-02-26 20:24 G	36314694.22	36314694.35	36314694.53	0.0078	0.0057
Mercury	94857-05-11 20:53 G	36366999.33	36366999.37	36366999.44	0.0061	0.0058
Mercury	94857-08-07 21:50 G	36367087.32	36367087.41	36367087.55	0.0061	0.0048
Mercury	94857-11-03 23:17 G	36367175.34	36367175.47	36367175.63	0.0061	0.0037
Mercury	94858-01-31 00:29 G	36367263.37	36367263.52	36367263.70	0.0061	0.0027
Mercury	94858-04-29 01:55 G	36367351.40	36367351.58	36367351.76	0.0061	0.0016
Mercury	94858-07-26 02:53 G	36367439.45	36367439.62	36367439.81	0.0061	0.0007
Mercury	94858-10-22 04:19 G	36367527.50	36367527.68	36367527.86	0.0061	0.0005
Mercury	94859-01-18 05:17 G	36367615.55	36367615.72	36367615.91	0.0061	0.0016
Mercury	94859-04-16 06:43 G	36367703.61	36367703.78	36367703.95	0.0061	0.0026
Mercury	94859-07-13 07:26 G	36367791.68	36367791.81	36367791.98	0.0062	0.0037
Mercury	94859-10-09 09:07 G	36367879.76	36367879.88	36367880.00	0.0062	0.0047
Mercury	94860-01-05 09:50 G	36367967.87	36367967.91	36367967.99	0.0062	0.0058
Earth	94864-07-05 07:41 G	36369610.63	36369610.82	36369611.07	0.0063	0.0032
Moon	94864-07-05 09:07 G	36369610.68	36369610.88	36369611.12	0.0063	0.0029 *
Moon	94865-07-06 15:50 G	36369976.97	36369977.16	36369977.37	0.0063	0.0041
Earth	94865-07-06 18:29 G	36369977.10	36369977.27	36369977.47	0.0063	0.0044 *
Venus	94871-05-02 23:31 G	36372103.30	36372103.48	36372103.69	0.0065	0.0029

Venus	94871-12-14 03:50 G	36372328.45	36372328.66	36372328.88	0.0066	0.0014
Venus	94872-07-26 07:26 G	36372553.73	36372553.81	36372553.95	0.0066	0.0057
Mercury	94950-09-02 05:17 G	36401079.64	36401079.72	36401079.80	0.0083	0.0067
Mercury	94950-11-29 06:29 G	36401167.66	36401167.77	36401167.89	0.0083	0.0047
Mercury	94951-02-25 07:41 G	36401255.70	36401255.82	36401255.96	0.0083	0.0027
Mercury	94951-05-24 09:07 G	36401343.74	36401343.88	36401344.02	0.0083	0.0007
Mercury	94951-08-20 10:19 G	36401431.80	36401431.93	36401432.07	0.0083	0.0013
Mercury	94951-11-16 11:31 G	36401519.86	36401519.98	36401520.12	0.0083	0.0033
Mercury	94952-02-12 12:57 G	36401607.94	36401608.04	36401608.15	0.0083	0.0052
Mercury	94952-05-10 13:55 G	36401696.03	36401696.08	36401696.16	0.0083	0.0072
Moon	94955-01-05 01:55 G	36402665.32	36402665.58	36402665.85	0.0081	0.0013
Earth	94955-01-05 05:17 G	36402665.48	36402665.72	36402665.99	0.0081	0.0015 *
Venus	94959-01-02 14:09 G	36404123.96	36404124.09	36404124.24	0.0079	0.0060
Venus	94959-08-16 00:43 G	36404349.31	36404349.53	36404349.75	0.0079	0.0017

# 96TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 96th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	95103-01-12 10:19 G	36456727.91	36456727.93	36456727.99	0.0061	0.0059		
Mercury	95103-04-10 11:17 G	36456815.89	36456815.97	36456816.10	0.0061	0.0049		
Mercury	95103-07-07 12:57 G	36456903.90	36456904.04	36456904.19	0.0061	0.0038		
Mercury	95103-10-03 13:55 G	36456991.93	36456992.08	36456992.26	0.0061	0.0028		

Mercury	95103-12-30 15:21 G	36457079.97	36457080.14	36457080.32	0.0061	0.0018
Mercury	95104-03-27 16:33 G	36457168.01	36457168.19	36457168.38	0.0061	0.0007
Mercury	95104-06-23 17:45 G	36457256.06	36457256.24	36457256.43	0.0061	0.0003
Mercury	95104-09-19 18:43 G	36457344.11	36457344.28	36457344.47	0.0061	0.0014
Mercury	95104-12-16 19:55 G	36457432.17	36457432.33	36457432.51	0.0061	0.0025
Mercury	95105-03-14 20:53 G	36457520.24	36457520.37	36457520.54	0.0062	0.0036
Mercury	95105-06-10 22:19 G	36457608.32	36457608.43	36457608.56	0.0062	0.0046
Mercury	95105-09-06 23:17 G	36457696.42	36457696.47	36457696.56	0.0062	0.0057
Mars	95108-03-05 15:36 G	36458606.88	36458607.15	36458607.44	0.0062	0.0014
Earth	95110-07-10 15:50 G	36459463.92	36459464.16	36459464.40	0.0063	0.0020
Moon	95110-07-10 18:43 G	36459464.04	36459464.28	36459464.54	0.0063	0.0017 *
Moon	95111-07-12 00:43 G	36459830.41	36459830.53	36459830.66	0.0063	0.0054
Earth	95111-07-12 01:26 G	36459830.48	36459830.56	36459830.72	0.0063	0.0057 *
Venus	95116-10-21 08:24 G	36461758.71	36461758.85	36461759.02	0.0065	0.0046
Venus	95117-06-03 12:57 G	36461983.82	36461984.04	36461984.26	0.0066	0.0003
Venus	95118-01-14 16:33 G	36462209.04	36462209.19	36462209.38	0.0066	0.0040
Mercury	95196-05-03 20:24 G	36490808.28	36490808.35	36490808.43	0.0083	0.0070
Mercury	95196-07-30 21:50 G	36490896.30	36490896.41	36490896.52	0.0083	0.0050
Mercury	95196-10-26 23:02 G	36490984.34	36490984.46	36490984.59	0.0083	0.0030
Mercury	95197-01-23 00:29 G	36491072.38	36491072.52	36491072.66	0.0083	0.0010
Mercury	95197-04-21 01:41 G	36491160.43	36491160.57	36491160.71	0.0083	0.0010
Mercury	95197-07-18 02:53 G	36491248.50	36491248.62	36491248.75	0.0083	0.0030
Mercury	95197-10-14 04:19 G	36491336.57	36491336.68	36491336.79	0.0083	0.0049
Mercury	95198-01-10 05:17 G	36491424.66	36491424.72	36491424.81	0.0083	0.0069
Mars	95199-06-04 19:55 G	36491935.00	36491935.33	36491935.68	0.0082	0.0019
Moon	95201-01-08 18:14 G	36492519.03	36492519.26	36492519.52	0.0081	0.0024
Earth	95201-01-08 19:12 G	36492519.05	36492519.30	36492519.55	0.0081	0.0021 *
Venus	95205-02-02 06:57 G	36494004.57	36494004.79	36494005.01	0.0079	0.0013
Venus	95205-09-15 17:02 G	36494230.08	36494230.21	36494230.35	0.0079	0.0063
Mercury	95348-12-09 00:57 G	36546544.45	36546544.54	36546544.63	0.0061	0.0052

Mercury	95349-03-07 01:41 G	36546632.45	36546632.57	36546632.72	0.0061	0.0042
Mercury	95349-06-03 02:53 G	36546720.48	36546720.62	36546720.80	0.0061	0.0032
Mercury	95349-08-30 04:19 G	36546808.51	36546808.68	36546808.86	0.0061	0.0021
Mercury	95349-11-26 05:31 G	36546896.55	36546896.73	36546896.92	0.0061	0.0011
Mercury	95350-02-22 06:57 G	36546984.60	36546984.79	36546984.97	0.0061	0.0001
Mercury	95350-05-21 07:55 G	36547072.65	36547072.83	36547073.02	0.0061	0.0010
Mercury	95350-08-17 09:07 G	36547160.71	36547160.88	36547161.06	0.0061	0.0021
Mercury	95350-11-13 10:05 G	36547248.78	36547248.92	36547249.09	0.0061	0.0032
Mercury	95351-02-09 11:31 G	36547336.85	36547336.98	36547337.12	0.0062	0.0042
Mercury	95351-05-08 12:29 G	36547424.94	36547425.02	36547425.13	0.0062	0.0053
Moon	95356-07-12 18:14 G	36549317.01	36549317.26	36549317.53	0.0063	0.0011
Earth	95356-07-12 20:53 G	36549317.14	36549317.37	36549317.64	0.0063	0.0013 *
Earth	95357-07-14 07:26 G	36549683.79	36549683.81	36549683.85	0.0064	0.0063
Moon	95357-07-14 10:33 G	36549683.91	36549683.94	36549684.02	0.0064	0.0062
Venus	95362-11-20 20:24 G	36551639.17	36551639.35	36551639.57	0.0065	0.0026
Venus	95363-07-04 00:57 G	36551864.33	36551864.54	36551864.75	0.0066	0.0017
Venus	95364-02-14 04:33 G	36552089.62	36552089.69	36552089.79	0.0066	0.0060
Mercury	95442-01-03 10:33 G	36580536.93	36580536.94	36580536.97	0.0084	0.0083
Mercury	95442-04-01 11:45 G	36580624.91	36580624.99	36580625.09	0.0083	0.0063
Mercury	95442-06-28 13:12 G	36580712.94	36580713.05	36580713.17	0.0083	0.0043
Mercury	95442-09-24 14:38 G	36580800.98	36580801.11	36580801.24	0.0083	0.0023
Mercury	95442-12-21 15:50 G	36580889.02	36580889.16	36580889.30	0.0083	0.0003
Mercury	95443-03-19 17:02 G	36580977.08	36580977.21	36580977.35	0.0083	0.0017
Mercury	95443-06-15 18:14 G	36581065.15	36581065.26	36581065.39	0.0083	0.0037
Mercury	95443-09-11 19:41 G	36581153.22	36581153.32	36581153.42	0.0083	0.0056
Mercury	95443-12-08 20:38 G	36581241.32	36581241.36	36581241.43	0.0083	0.0076
Earth	95447-01-13 01:55 G	36582372.37	36582372.58	36582372.83	0.0081	0.0038
Moon	95447-01-13 06:00 G	36582372.53	36582372.75	36582372.98	0.0081	0.0041 *
Venus	95450-07-23 09:21 G	36583659.75	36583659.89	36583660.06	0.0079	0.0058
Venus	95451-03-05 19:41 G	36583885.12	36583885.32	36583885.56	0.0079	0.0020

Mercury	95594-08-10 13:12 G	36636273.01	36636273.05	36636273.14	0.0061	0.0057
Mercury	95594-11-06 14:24 G	36636361.00	36636361.10	36636361.24	0.0061	0.0047
Mercury	95595-02-02 15:50 G	36636449.02	36636449.16	36636449.32	0.0061	0.0036
Mercury	95595-05-01 17:02 G	36636537.06	36636537.21	36636537.39	0.0061	0.0026
Mercury	95595-07-28 18:28 G	36636625.09	36636625.27	36636625.45	0.0061	0.0015
Mercury	95595-10-24 19:40 G	36636713.14	36636713.32	36636713.51	0.0061	0.0005
Mercury	95596-01-20 20:52 G	36636801.19	36636801.37	36636801.56	0.0061	0.0006
Mercury	95596-04-17 21:50 G	36636889.24	36636889.41	36636889.60	0.0061	0.0017
Mercury	95596-07-14 23:16 G	36636977.31	36636977.47	36636977.64	0.0061	0.0027
Mercury	95596-10-11 00:14 G	36637065.38	36637065.51	36637065.67	0.0061	0.0038
Mercury	95597-01-07 01:40 G	36637153.46	36637153.57	36637153.69	0.0062	0.0048
Mercury	95597-04-05 02:38 G	36637241.57	36637241.61	36637241.68	0.0062	0.0059
Moon	95602-07-17 00:43 G	36639170.29	36639170.53	36639170.79	0.0063	0.0007
Earth	95602-07-17 02:24 G	36639170.35	36639170.60	36639170.86	0.0063	0.0007 *
Venus	95608-05-10 04:04 G	36641294.54	36641294.67	36641294.83	0.0065	0.0048
Venus	95608-12-21 08:24 G	36641519.64	36641519.85	36641520.07	0.0066	0.0006
Venus	95609-08-03 12:28 G	36641744.84	36641745.02	36641745.20	0.0066	0.0037
Mercury	95687-12-01 02:09 G	36670353.54	36670353.59	36670353.67	0.0084	0.0073
Mercury	95688-02-27 03:36 G	36670441.55	36670441.65	36670441.77	0.0083	0.0053
Mercury	95688-05-25 05:02 G	36670529.59	36670529.71	36670529.84	0.0083	0.0033
Mercury	95688-08-21 06:14 G	36670617.63	36670617.76	36670617.90	0.0083	0.0014
Mercury	95688-11-17 07:40 G	36670705.68	36670705.82	36670705.96	0.0083	0.0007
Mercury	95689-02-13 08:52 G	36670793.74	36670793.87	36670794.01	0.0083	0.0027
Mercury	95689-05-12 10:04 G	36670881.81	36670881.92	36670882.04	0.0083	0.0046
Mercury	95689-08-08 11:16 G	36670969.90	36670969.97	36670970.06	0.0083	0.0066
Moon	95693-01-15 09:21 G	36672225.74	36672225.89	36672226.09	0.0081	0.0062
Earth	95693-01-15 10:48 G	36672225.78	36672225.95	36672226.15	0.0081	0.0058 *
Venus	95696-08-21 23:16 G	36673540.27	36673540.47	36673540.70	0.0079	0.0022
Venus	95697-04-04 09:36 G	36673765.76	36673765.90	36673766.08	0.0079	0.0056
Mercury	95840-07-08 02:52 G	36726089.55	36726089.62	36726089.71	0.0061	0.0054

Mercury	95840-10-04 03:50 G	36726177.55	36726177.66	36726177.81	0.0061	0.0044
Mercury	95840-12-31 05:31 G	36726265.57	36726265.73	36726265.88	0.0061	0.0033
Mercury	95841-03-29 06:28 G	36726353.61	36726353.77	36726353.95	0.0061	0.0023
Mercury	95841-06-25 07:55 G	36726441.65	36726441.83	36726442.01	0.0061	0.0013
Mercury	95841-09-21 09:07 G	36726529.69	36726529.88	36726530.07	0.0061	0.0002
Mercury	95841-12-18 10:19 G	36726617.75	36726617.93	36726618.11	0.0061	0.0008
Mercury	95842-03-16 11:16 G	36726705.80	36726705.97	36726706.16	0.0061	0.0019
Mercury	95842-06-12 12:28 G	36726793.87	36726794.02	36726794.19	0.0061	0.0030
Mercury	95842-09-08 13:26 G	36726881.94	36726882.06	36726882.22	0.0061	0.0041
Mercury	95842-12-05 14:52 G	36726970.03	36726970.12	36726970.24	0.0062	0.0051
Mercury	95843-03-03 16:04 G	36727058.17	36727058.17	36727058.20	0.0062	0.0061
Mars	95845-06-26 08:38 G	36727903.58	36727903.86	36727904.14	0.0062	0.0013
Earth	95848-07-20 05:02 G	36729023.46	36729023.71	36729023.97	0.0063	0.0008
Moon	95848-07-20 08:38 G	36729023.62	36729023.86	36729024.12	0.0063	0.0009 *
Venus	95854-06-10 13:55 G	36731174.91	36731175.08	36731175.28	0.0065	0.0034
Venus	95855-01-21 18:14 G	36731400.05	36731400.26	36731400.48	0.0066	0.0009
Venus	95855-09-03 21:50 G	36731625.30	36731625.41	36731625.57	0.0066	0.0052
Mercury	95933-10-29 17:16 G	36760170.16	36760170.22	36760170.28	0.0084	0.0074
Mercury	95934-01-25 18:14 G	36760258.17	36760258.26	36760258.38	0.0083	0.0055
Mercury	95934-04-23 19:40 G	36760346.20	36760346.32	36760346.45	0.0083	0.0034
Mercury	95934-07-20 21:07 G	36760434.24	36760434.38	36760434.52	0.0083	0.0014
Mercury	95934-10-16 22:19 G	36760522.30	36760522.43	36760522.57	0.0083	0.0006
Mercury	95935-01-12 23:31 G	36760610.35	36760610.48	36760610.62	0.0083	0.0025
Mercury	95935-04-11 00:57 G	36760698.42	36760698.54	36760698.65	0.0083	0.0044
Mercury	95935-07-08 01:55 G	36760786.50	36760786.58	36760786.68	0.0083	0.0064
Mars	95936-09-21 11:16 G	36761227.71	36761227.97	36761228.28	0.0082	0.0048
Moon	95939-01-20 10:19 G	36762078.77	36762078.93	36762079.12	0.0081	0.0059
Earth	95939-01-20 13:12 G	36762078.87	36762079.05	36762079.26	0.0081	0.0055 *
Venus	95942-09-23 09:21 G	36763420.67	36763420.89	36763421.12	0.0079	0.0003
Venus	95943-05-06 19:12 G	36763646.26	36763646.30	36763646.40	0.0079	0.0075



# 97TH MILLENNIUM CE

**This is a list of transits visible from Pluto in the 97th millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	96086-06-04 16:04	G	36815906.09	36815906.17	36815906.29	0.0061	0.0052	
Mercury	96086-08-31 17:45	G	36815994.10	36815994.24	36815994.38	0.0061	0.0041	
Mercury	96086-11-27 18:43	G	36816082.13	36816082.28	36816082.45	0.0061	0.0031	
Mercury	96087-02-23 19:55	G	36816170.16	36816170.33	36816170.52	0.0061	0.0021	
Mercury	96087-05-22 21:21	G	36816258.21	36816258.39	36816258.57	0.0061	0.0010	
Mercury	96087-08-18 22:33	G	36816346.25	36816346.44	36816346.63	0.0061	0.0000	
Mercury	96087-11-14 23:45	G	36816434.31	36816434.49	36816434.67	0.0061	0.0011	
Mercury	96088-02-11 00:43	G	36816522.37	36816522.53	36816522.71	0.0061	0.0022	
Mercury	96088-05-09 02:09	G	36816610.43	36816610.59	36816610.75	0.0061	0.0032	
Mercury	96088-08-05 02:52	G	36816698.51	36816698.62	36816698.77	0.0061	0.0043	
Mercury	96088-11-01 04:33	G	36816786.60	36816786.69	36816786.78	0.0062	0.0053	
Mars	96091-11-18 20:52	G	36817899.23	36817899.37	36817899.53	0.0062	0.0053	
Earth	96094-07-23 08:09	G	36818876.59	36818876.84	36818877.10	0.0063	0.0008	
Moon	96094-07-23 08:09	G	36818876.59	36818876.84	36818877.12	0.0063	0.0011	*
Venus	96099-11-27 20:24	G	36820830.28	36820830.35	36820830.44	0.0065	0.0061	
Venus	96100-07-11 00:28	G	36821055.32	36821055.52	36821055.73	0.0065	0.0019	
Venus	96101-02-21 04:19	G	36821280.49	36821280.68	36821280.89	0.0066	0.0024	
Mercury	96179-09-26 07:55	G	36849986.77	36849986.83	36849986.90	0.0084	0.0073	

Mercury	96179-12-23 09:21 G	36850074.79	36850074.89	36850075.00	0.0083	0.0053
Mercury	96180-03-20 10:33 G	36850162.82	36850162.94	36850163.07	0.0083	0.0033
Mercury	96180-06-16 12:00 G	36850250.86	36850251.00	36850251.13	0.0083	0.0013
Mercury	96180-09-12 13:12 G	36850338.91	36850339.05	36850339.19	0.0083	0.0006
Mercury	96180-12-09 14:24 G	36850426.97	36850427.10	36850427.24	0.0083	0.0026
Mercury	96181-03-07 15:36 G	36850515.04	36850515.15	36850515.27	0.0083	0.0046
Mercury	96181-06-03 16:48 G	36850603.13	36850603.20	36850603.30	0.0083	0.0065
Earth	96185-01-22 16:48 G	36851932.05	36851932.20	36851932.41	0.0081	0.0059
Moon	96185-01-22 19:12 G	36851932.17	36851932.30	36851932.50	0.0081	0.0062 *
Venus	96188-03-11 09:50 G	36853075.77	36853075.91	36853076.08	0.0079	0.0056
Venus	96188-10-22 20:24 G	36853301.14	36853301.35	36853301.58	0.0079	0.0022
Mercury	96332-05-03 05:16 G	36905722.64	36905722.72	36905722.84	0.0061	0.0051
Mercury	96332-07-30 06:14 G	36905810.65	36905810.76	36905810.92	0.0061	0.0041
Mercury	96332-10-26 07:55 G	36905898.67	36905898.83	36905899.00	0.0061	0.0030
Mercury	96333-01-22 08:52 G	36905986.71	36905986.87	36905987.06	0.0061	0.0020
Mercury	96333-04-20 10:33 G	36906074.75	36906074.94	36906075.12	0.0061	0.0009
Mercury	96333-07-17 11:45 G	36906162.80	36906162.99	36906163.17	0.0061	0.0001
Mercury	96333-10-13 12:57 G	36906250.86	36906251.04	36906251.22	0.0061	0.0012
Mercury	96334-01-09 13:40 G	36906338.92	36906339.07	36906339.26	0.0061	0.0023
Mercury	96334-04-07 15:07 G	36906426.98	36906427.13	36906427.30	0.0061	0.0033
Mercury	96334-07-04 16:04 G	36906515.06	36906515.17	36906515.32	0.0061	0.0044
Mercury	96334-09-30 17:31 G	36906603.15	36906603.23	36906603.33	0.0061	0.0054
Moon	96340-07-27 06:00 G	36908729.51	36908729.75	36908730.00	0.0063	0.0015
Earth	96340-07-27 09:36 G	36908729.66	36908729.90	36908730.16	0.0063	0.0012 *
Earth	96341-07-28 19:40 G	36909096.32	36909096.32	36909096.38	0.0064	0.0064
Venus	96345-12-29 05:45 G	36910710.61	36910710.74	36910710.89	0.0065	0.0050
Venus	96346-08-11 09:50 G	36910935.70	36910935.91	36910936.13	0.0065	0.0008
Venus	96347-03-24 13:26 G	36911160.89	36911161.06	36911161.26	0.0066	0.0035
Mercury	96425-08-23 22:19 G	36939803.39	36939803.43	36939803.48	0.0084	0.0079
Mercury	96425-11-19 23:16 G	36939891.39	36939891.47	36939891.58	0.0084	0.0060

Mercury	96426-02-16 00:43 G	36939979.42	36939979.53	36939979.66	0.0083	0.0040
Mercury	96426-05-15 02:09 G	36940067.46	36940067.59	36940067.73	0.0083	0.0020
Mercury	96426-08-11 03:36 G	36940155.51	36940155.65	36940155.78	0.0083	0.0002
Mercury	96426-11-07 04:33 G	36940243.56	36940243.69	36940243.83	0.0083	0.0020
Mercury	96427-02-03 06:00 G	36940331.63	36940331.75	36940331.87	0.0083	0.0039
Mercury	96427-05-02 06:57 G	36940419.71	36940419.79	36940419.90	0.0083	0.0059
Mercury	96427-07-29 08:24 G	36940507.81	36940507.85	36940507.90	0.0083	0.0078
Earth	96431-01-26 16:33 G	36941785.00	36941785.19	36941785.42	0.0081	0.0047
Moon	96431-01-26 18:28 G	36941785.07	36941785.27	36941785.50	0.0081	0.0048 *
Venus	96434-04-11 18:28 G	36942956.10	36942956.27	36942956.47	0.0079	0.0044
Venus	96434-11-23 05:02 G	36943181.52	36943181.71	36943181.93	0.0079	0.0034
Mercury	96578-03-30 18:14 G	36995539.17	36995539.26	36995539.36	0.0061	0.0052
Mercury	96578-06-26 19:12 G	36995627.18	36995627.30	36995627.45	0.0061	0.0042
Mercury	96578-09-22 20:24 G	36995715.20	36995715.35	36995715.52	0.0061	0.0032
Mercury	96578-12-19 21:50 G	36995803.24	36995803.41	36995803.59	0.0061	0.0021
Mercury	96579-03-17 23:02 G	36995891.28	36995891.46	36995891.65	0.0061	0.0011
Mercury	96579-06-14 00:28 G	36995979.33	36995979.52	36995979.70	0.0061	0.0001
Mercury	96579-09-10 01:26 G	36996067.38	36996067.56	36996067.75	0.0061	0.0010
Mercury	96579-12-07 02:38 G	36996155.44	36996155.61	36996155.79	0.0061	0.0021
Mercury	96580-03-04 03:36 G	36996243.51	36996243.65	36996243.83	0.0061	0.0032
Mercury	96580-05-31 05:02 G	36996331.58	36996331.71	36996331.86	0.0061	0.0042
Mercury	96580-08-27 06:00 G	36996419.68	36996419.75	36996419.87	0.0061	0.0053
Mars	96582-10-16 10:19 G	36997199.82	36997199.93	36997200.13	0.0062	0.0053
Earth	96586-07-30 10:19 G	36998582.69	36998582.93	36998583.18	0.0063	0.0019
Moon	96586-07-30 11:16 G	36998582.76	36998582.97	36998583.22	0.0063	0.0023 *
Moon	96587-07-31 17:31 G	36998949.15	36998949.23	36998949.34	0.0064	0.0059
Earth	96587-07-31 20:38 G	36998949.26	36998949.36	36998949.50	0.0064	0.0056 *
Venus	96592-01-28 14:38 G	37000590.94	37000591.11	37000591.28	0.0065	0.0041
Venus	96592-09-09 18:43 G	37000816.06	37000816.28	37000816.49	0.0065	0.0002
Venus	96593-04-22 22:33 G	37001041.29	37001041.44	37001041.61	0.0066	0.0044

Mercury	96671-07-22 12:28 G	37029620.02	37029620.02	37029620.06	0.0084	0.0083
Mercury	96671-10-18 13:55 G	37029708.00	37029708.08	37029708.18	0.0084	0.0063
Mercury	96672-01-14 15:21 G	37029796.03	37029796.14	37029796.26	0.0083	0.0043
Mercury	96672-04-11 16:33 G	37029884.07	37029884.19	37029884.33	0.0083	0.0023
Mercury	96672-07-08 18:00 G	37029972.11	37029972.25	37029972.39	0.0083	0.0004
Mercury	96672-10-04 19:12 G	37030060.17	37030060.30	37030060.44	0.0083	0.0016
Mercury	96672-12-31 20:24 G	37030148.23	37030148.35	37030148.48	0.0083	0.0036
Mercury	96673-03-29 21:36 G	37030236.31	37030236.40	37030236.51	0.0083	0.0055
Mercury	96673-06-25 23:02 G	37030324.40	37030324.46	37030324.52	0.0083	0.0074
Moon	96677-01-29 14:09 G	37031637.88	37031638.09	37031638.34	0.0081	0.0039
Earth	96677-01-29 18:00 G	37031638.03	37031638.25	37031638.48	0.0081	0.0039 *
Venus	96680-05-12 03:36 G	37032836.46	37032836.65	37032836.88	0.0079	0.0028
Jupiter	96680-07-05 20:24 G	37032891.05	37032891.35	37032891.68	0.0079	0.0065
Venus	96680-12-23 14:09 G	37033061.93	37033062.09	37033062.28	0.0079	0.0050
Mercury	96824-02-26 06:28 G	37085355.70	37085355.77	37085355.84	0.0061	0.0056
Mercury	96824-05-24 07:26 G	37085443.70	37085443.81	37085443.94	0.0061	0.0046
Mercury	96824-08-20 08:24 G	37085531.72	37085531.85	37085532.02	0.0061	0.0036
Mercury	96824-11-16 10:04 G	37085619.75	37085619.92	37085620.09	0.0061	0.0025
Mercury	96825-02-12 11:02 G	37085707.79	37085707.96	37085708.15	0.0061	0.0015
Mercury	96825-05-11 12:28 G	37085795.84	37085796.02	37085796.21	0.0061	0.0004
Mercury	96825-08-07 13:40 G	37085883.89	37085884.07	37085884.26	0.0061	0.0006
Mercury	96825-11-03 14:52 G	37085971.94	37085972.12	37085972.30	0.0061	0.0016
Mercury	96826-01-30 15:50 G	37086060.01	37086060.16	37086060.34	0.0061	0.0027
Mercury	96826-04-28 17:16 G	37086148.08	37086148.22	37086148.37	0.0061	0.0038
Mercury	96826-07-25 18:00 G	37086236.16	37086236.25	37086236.39	0.0061	0.0049
Mercury	96826-10-21 19:40 G	37086324.28	37086324.32	37086324.38	0.0061	0.0059
Mars	96829-03-10 18:43 G	37087195.00	37087195.28	37087195.57	0.0062	0.0005
Earth	96832-08-02 08:38 G	37088435.67	37088435.86	37088436.11	0.0063	0.0033
Moon	96832-08-02 12:00 G	37088435.80	37088436.00	37088436.24	0.0063	0.0035 *
Moon	96833-08-03 18:43 G	37088802.13	37088802.28	37088802.47	0.0064	0.0046

Earth	96833-08-03 19:55 G	37088802.15	37088802.33	37088802.53	0.0064	0.0043	*
Venus	96838-02-27 21:50 G	37090471.24	37090471.41	37090471.60	0.0065	0.0037	
Venus	96838-10-11 01:55 G	37090696.36	37090696.58	37090696.80	0.0065	0.0006	
Venus	96839-05-24 06:00 G	37090921.61	37090921.75	37090921.90	0.0066	0.0048	
Mercury	96917-09-15 03:21 G	37119524.60	37119524.64	37119524.70	0.0084	0.0077	
Mercury	96917-12-12 04:48 G	37119612.60	37119612.70	37119612.80	0.0084	0.0057	
Mercury	96918-03-10 06:14 G	37119700.64	37119700.76	37119700.88	0.0083	0.0037	
Mercury	96918-06-06 07:26 G	37119788.68	37119788.81	37119788.95	0.0083	0.0017	
Mercury	96918-09-02 08:38 G	37119876.73	37119876.86	37119877.00	0.0083	0.0003	
Mercury	96918-11-29 09:50 G	37119964.78	37119964.91	37119965.05	0.0083	0.0022	
Mercury	96919-02-25 11:16 G	37120052.85	37120052.97	37120053.09	0.0083	0.0041	
Mercury	96919-05-24 12:14 G	37120140.93	37120141.01	37120141.11	0.0083	0.0061	
Mercury	96919-08-20 13:40 G	37120229.04	37120229.07	37120229.11	0.0083	0.0080	
Earth	96923-02-02 12:57 G	37121490.79	37121491.04	37121491.31	0.0081	0.0012	
Moon	96923-02-02 13:12 G	37121490.81	37121491.05	37121491.31	0.0081	0.0010	*
Venus	96926-06-12 09:36 G	37122716.69	37122716.90	37122717.12	0.0079	0.0027	
Venus	96927-01-23 19:40 G	37122942.17	37122942.32	37122942.51	0.0079	0.0051	

# 98TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 98th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	97070-04-21 18:57 G	37175260.22	37175260.29	37175260.38	0.0061	0.0054		

Mercury	97070-07-18 19:55 G	37175348.22	37175348.33	37175348.48	0.0061	0.0044
Mercury	97070-10-14 21:07 G	37175436.24	37175436.38	37175436.56	0.0061	0.0034
Mercury	97071-01-10 22:33 G	37175524.28	37175524.44	37175524.62	0.0061	0.0023
Mercury	97071-04-08 23:45 G	37175612.32	37175612.49	37175612.69	0.0061	0.0013
Mercury	97071-07-06 01:12 G	37175700.37	37175700.55	37175700.74	0.0061	0.0002
Mercury	97071-10-02 02:24 G	37175788.42	37175788.60	37175788.79	0.0061	0.0008
Mercury	97071-12-29 03:36 G	37175876.48	37175876.65	37175876.83	0.0061	0.0019
Mercury	97072-03-26 04:33 G	37175964.54	37175964.69	37175964.87	0.0061	0.0029
Mercury	97072-06-22 06:00 G	37176052.62	37176052.75	37176052.90	0.0061	0.0040
Mercury	97072-09-18 06:57 G	37176140.70	37176140.79	37176140.91	0.0061	0.0050
Mercury	97072-12-15 08:24 G	37176228.83	37176228.85	37176228.88	0.0061	0.0061
Mars	97075-08-03 20:24 G	37177190.13	37177190.35	37177190.63	0.0062	0.0031
Moon	97078-08-06 02:09 G	37178288.47	37178288.59	37178288.74	0.0063	0.0054
Earth	97078-08-06 05:02 G	37178288.58	37178288.71	37178288.88	0.0063	0.0051 *
Earth	97079-08-07 15:21 G	37178654.93	37178655.14	37178655.40	0.0063	0.0024
Moon	97079-08-07 19:26 G	37178655.08	37178655.31	37178655.56	0.0063	0.0025 *
Venus	97084-03-30 03:50 G	37180351.49	37180351.66	37180351.83	0.0065	0.0039
Venus	97084-11-10 07:40 G	37180576.60	37180576.82	37180577.04	0.0065	0.0003
Venus	97085-06-23 11:31 G	37180801.84	37180801.98	37180802.14	0.0066	0.0046
Mercury	97163-11-09 17:45 G	37209429.19	37209429.24	37209429.31	0.0084	0.0074
Mercury	97164-02-05 18:57 G	37209517.20	37209517.29	37209517.40	0.0084	0.0055
Mercury	97164-05-03 20:24 G	37209605.23	37209605.35	37209605.48	0.0083	0.0034
Mercury	97164-07-30 21:36 G	37209693.27	37209693.40	37209693.54	0.0083	0.0015
Mercury	97164-10-26 23:02 G	37209781.32	37209781.46	37209781.60	0.0083	0.0005
Mercury	97165-01-23 00:14 G	37209869.38	37209869.51	37209869.64	0.0083	0.0024
Mercury	97165-04-21 01:26 G	37209957.45	37209957.56	37209957.68	0.0083	0.0044
Mercury	97165-07-18 02:38 G	37210045.53	37210045.61	37210045.70	0.0083	0.0063
Mercury	97165-10-14 03:50 G	37210133.66	37210133.66	37210133.68	0.0083	0.0082
Mars	97166-10-24 15:21 G	37210508.80	37210509.14	37210509.50	0.0082	0.0012
Earth	97169-02-05 06:14 G	37211343.52	37211343.76	37211344.02	0.0081	0.0022

Moon	97169-02-05 09:21 G	37211343.65	37211343.89	37211344.15	0.0081	0.0026 *
Venus	97172-07-12 14:24 G	37212596.90	37212597.10	37212597.32	0.0079	0.0031
Venus	97173-02-23 00:43 G	37212822.36	37212822.53	37212822.72	0.0079	0.0047
Mercury	97316-06-15 06:43 G	37265164.72	37265164.78	37265164.88	0.0061	0.0055
Mercury	97316-09-11 07:55 G	37265252.72	37265252.83	37265252.98	0.0061	0.0045
Mercury	97316-12-08 09:35 G	37265340.75	37265340.90	37265341.06	0.0061	0.0034
Mercury	97317-03-06 10:33 G	37265428.78	37265428.94	37265429.12	0.0061	0.0024
Mercury	97317-06-02 11:45 G	37265516.82	37265516.99	37265517.18	0.0061	0.0014
Mercury	97317-08-29 13:11 G	37265604.87	37265605.05	37265605.24	0.0061	0.0003
Mercury	97317-11-25 14:24 G	37265692.92	37265693.10	37265693.29	0.0061	0.0007
Mercury	97318-02-21 15:21 G	37265780.98	37265781.14	37265781.33	0.0061	0.0018
Mercury	97318-05-20 16:33 G	37265869.04	37265869.19	37265869.37	0.0061	0.0028
Mercury	97318-08-16 18:00 G	37265957.11	37265957.25	37265957.40	0.0061	0.0039
Mercury	97318-11-12 18:57 G	37266045.20	37266045.29	37266045.42	0.0061	0.0049
Mercury	97319-02-08 20:24 G	37266133.32	37266133.35	37266133.40	0.0061	0.0060
Mars	97321-12-26 20:52 G	37267185.27	37267185.37	37267185.53	0.0062	0.0056
Moon	97325-08-10 07:55 G	37268507.57	37268507.83	37268508.10	0.0063	0.0003
Earth	97325-08-10 09:21 G	37268507.64	37268507.89	37268508.15	0.0063	0.0003 *
Venus	97330-04-30 07:55 G	37270231.70	37270231.83	37270232.00	0.0065	0.0046
Venus	97330-12-11 12:14 G	37270456.79	37270457.01	37270457.23	0.0065	0.0004
Venus	97331-07-24 15:35 G	37270682.00	37270682.15	37270682.35	0.0065	0.0039
Mercury	97410-01-03 06:57 G	37299333.78	37299333.79	37299333.82	0.0084	0.0083
Mercury	97410-04-01 08:24 G	37299421.77	37299421.85	37299421.94	0.0084	0.0063
Mercury	97410-06-28 09:35 G	37299509.79	37299509.90	37299510.02	0.0083	0.0043
Mercury	97410-09-24 11:02 G	37299597.83	37299597.96	37299598.09	0.0083	0.0024
Mercury	97410-12-21 12:14 G	37299685.88	37299686.01	37299686.15	0.0083	0.0005
Mercury	97411-03-19 13:26 G	37299773.93	37299774.06	37299774.20	0.0083	0.0016
Mercury	97411-06-15 14:38 G	37299861.99	37299862.11	37299862.24	0.0083	0.0035
Mercury	97411-09-11 16:04 G	37299950.07	37299950.17	37299950.27	0.0083	0.0054
Mercury	97411-12-08 17:02 G	37300038.16	37300038.21	37300038.28	0.0083	0.0074

Mars	97413-03-17 20:38 G	37300503.07	37300503.36	37300503.71	0.0082	0.0036
Earth	97415-02-08 15:50 G	37301196.13	37301196.16	37301196.25	0.0081	0.0079
Venus	97418-08-12 14:52 G	37302476.97	37302477.12	37302477.30	0.0079	0.0054
Venus	97419-03-26 01:26 G	37302702.36	37302702.56	37302702.79	0.0079	0.0025
Mercury	97562-11-05 18:57 G	37355157.20	37355157.29	37355157.40	0.0061	0.0051
Mercury	97563-02-01 20:09 G	37355245.22	37355245.34	37355245.49	0.0061	0.0041
Mercury	97563-04-30 21:21 G	37355333.24	37355333.39	37355333.57	0.0061	0.0031
Mercury	97563-07-27 22:48 G	37355421.28	37355421.45	37355421.63	0.0061	0.0020
Mercury	97563-10-24 00:00 G	37355509.32	37355509.50	37355509.69	0.0061	0.0010
Mercury	97564-01-20 01:26 G	37355597.37	37355597.56	37355597.75	0.0061	0.0001
Mercury	97564-04-17 02:38 G	37355685.43	37355685.61	37355685.80	0.0061	0.0011
Mercury	97564-07-14 03:50 G	37355773.49	37355773.66	37355773.84	0.0061	0.0022
Mercury	97564-10-10 04:48 G	37355861.56	37355861.70	37355861.88	0.0061	0.0032
Mercury	97565-01-06 06:14 G	37355949.63	37355949.76	37355949.90	0.0061	0.0043
Mercury	97565-04-04 07:11 G	37356037.73	37356037.80	37356037.91	0.0061	0.0053
Moon	97571-08-13 20:52 G	37358360.20	37358360.37	37358360.59	0.0063	0.0041
Earth	97571-08-13 23:45 G	37358360.30	37358360.49	37358360.71	0.0063	0.0038 *
Earth	97572-08-14 10:19 G	37358726.73	37358726.93	37358727.15	0.0064	0.0037
Moon	97572-08-14 10:19 G	37358726.75	37358726.93	37358727.16	0.0064	0.0040 *
Venus	97576-05-30 09:50 G	37360111.87	37360111.91	37360112.01	0.0065	0.0062
Venus	97577-01-10 14:09 G	37360336.89	37360337.09	37360337.31	0.0065	0.0020
Venus	97577-08-23 18:00 G	37360562.06	37360562.25	37360562.47	0.0065	0.0022
Venus	97578-04-05 21:50 G	37360787.40	37360787.41	37360787.46	0.0066	0.0065
Mercury	97656-05-24 20:52 G	37389326.34	37389326.37	37389326.43	0.0084	0.0078
Mercury	97656-08-20 22:19 G	37389414.34	37389414.43	37389414.53	0.0084	0.0058
Mercury	97656-11-16 23:31 G	37389502.37	37389502.48	37389502.61	0.0083	0.0039
Mercury	97657-02-13 00:57 G	37389590.41	37389590.54	37389590.67	0.0083	0.0019
Mercury	97657-05-12 02:09 G	37389678.46	37389678.59	37389678.73	0.0083	0.0002
Mercury	97657-08-08 03:21 G	37389766.51	37389766.64	37389766.78	0.0083	0.0020
Mercury	97657-11-04 04:33 G	37389854.58	37389854.69	37389854.82	0.0083	0.0040



Mercury	97658-01-31 05:45 G	37389942.65	37389942.74	37389942.84	0.0083	0.0059
Mercury	97658-04-29 06:57 G	37390030.76	37390030.79	37390030.84	0.0083	0.0078
Mars	97659-08-08 17:31 G	37390497.00	37390497.23	37390497.51	0.0082	0.0057
Moon	97662-02-12 05:31 G	37391415.46	37391415.73	37391416.00	0.0081	0.0016
Earth	97662-02-12 06:14 G	37391415.51	37391415.76	37391416.02	0.0081	0.0014 *
Venus	97665-04-24 00:00 G	37392582.28	37392582.50	37392582.73	0.0079	0.0006
Venus	97665-12-05 10:33 G	37392807.86	37392807.94	37392808.04	0.0079	0.0072
Mercury	97808-12-30 05:16 G	37445061.72	37445061.72	37445061.76	0.0061	0.0060
Mercury	97809-03-28 06:43 G	37445149.69	37445149.78	37445149.89	0.0061	0.0050
Mercury	97809-06-24 07:55 G	37445237.70	37445237.83	37445237.98	0.0061	0.0040
Mercury	97809-09-20 08:52 G	37445325.73	37445325.87	37445326.06	0.0061	0.0030
Mercury	97809-12-17 10:33 G	37445413.76	37445413.94	37445414.12	0.0061	0.0019
Mercury	97810-03-15 11:45 G	37445501.81	37445501.99	37445502.18	0.0061	0.0009
Mercury	97810-06-11 12:57 G	37445589.86	37445590.04	37445590.23	0.0061	0.0002
Mercury	97810-09-07 14:09 G	37445677.91	37445678.09	37445678.28	0.0061	0.0012
Mercury	97810-12-04 15:21 G	37445765.97	37445766.14	37445766.32	0.0061	0.0022
Mercury	97811-03-02 16:19 G	37445854.04	37445854.18	37445854.36	0.0061	0.0033
Mercury	97811-05-29 17:45 G	37445942.12	37445942.24	37445942.38	0.0061	0.0043
Mercury	97811-08-25 18:43 G	37446030.22	37446030.28	37446030.39	0.0061	0.0054
Moon	97818-08-17 19:26 G	37448579.06	37448579.31	37448579.56	0.0063	0.0000
Earth	97818-08-17 22:48 G	37448579.19	37448579.45	37448579.71	0.0063	0.0004 *
Venus	97823-02-10 14:24 G	37450216.96	37450217.10	37450217.29	0.0065	0.0041
Venus	97823-09-23 18:43 G	37450442.07	37450442.28	37450442.50	0.0065	0.0002
Venus	97824-05-05 22:19 G	37450667.29	37450667.43	37450667.61	0.0065	0.0044
Mercury	97902-10-16 09:50 G	37479318.90	37479318.91	37479318.94	0.0084	0.0083
Mercury	97903-01-12 11:16 G	37479406.88	37479406.97	37479407.06	0.0084	0.0063
Mercury	97903-04-10 12:28 G	37479494.91	37479495.02	37479495.14	0.0083	0.0043
Mercury	97903-07-07 13:55 G	37479582.95	37479583.08	37479583.21	0.0083	0.0024
Mercury	97903-10-03 15:07 G	37479670.99	37479671.13	37479671.27	0.0083	0.0004
Mercury	97903-12-30 16:19 G	37479759.05	37479759.18	37479759.32	0.0083	0.0015

Mercury	97904-03-27 17:31 G	37479847.11	37479847.23	37479847.36	0.0083	0.0035
Mercury	97904-06-23 18:43 G	37479935.18	37479935.28	37479935.39	0.0083	0.0054
Mercury	97904-09-19 19:55 G	37480023.28	37480023.33	37480023.40	0.0083	0.0073
Mars	97905-12-31 01:40 G	37480490.28	37480490.57	37480490.91	0.0082	0.0037
Moon	97908-02-16 04:04 G	37481267.61	37481267.67	37481267.79	0.0081	0.0076
Earth	97908-02-16 06:28 G	37481267.70	37481267.77	37481267.90	0.0081	0.0075 *
Venus	97911-05-25 18:43 G	37482462.13	37482462.28	37482462.46	0.0079	0.0053
Venus	97912-01-06 05:45 G	37482687.52	37482687.74	37482687.95	0.0079	0.0025

# 99TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 99th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	98055-08-17 17:02 G	37535142.15	37535142.21	37535142.31	0.0061	0.0055		
Mercury	98055-11-13 18:14 G	37535230.15	37535230.26	37535230.41	0.0061	0.0045		
Mercury	98056-02-09 19:26 G	37535318.18	37535318.31	37535318.48	0.0061	0.0035		
Mercury	98056-05-07 21:07 G	37535406.21	37535406.38	37535406.55	0.0061	0.0024		
Mercury	98056-08-03 22:04 G	37535494.25	37535494.42	37535494.62	0.0061	0.0014		
Mercury	98056-10-30 23:31 G	37535582.30	37535582.48	37535582.67	0.0061	0.0004		
Mercury	98057-01-27 00:43 G	37535670.35	37535670.53	37535670.72	0.0061	0.0007		
Mercury	98057-04-25 01:55 G	37535758.41	37535758.58	37535758.77	0.0061	0.0017		
Mercury	98057-07-22 02:52 G	37535846.47	37535846.62	37535846.80	0.0061	0.0028		
Mercury	98057-10-18 04:19 G	37535934.54	37535934.68	37535934.84	0.0061	0.0038		

Mercury	98058-01-14 05:45 G	37536022.63	37536022.74	37536022.85	0.0061	0.0049
Mercury	98058-04-12 06:28 G	37536110.75	37536110.77	37536110.84	0.0061	0.0060
Mars	98061-03-05 16:33 G	37537169.11	37537169.19	37537169.36	0.0062	0.0057
Earth	98064-08-19 07:26 G	37538431.68	37538431.81	37538431.94	0.0063	0.0054
Moon	98064-08-19 09:07 G	37538431.76	37538431.88	37538432.05	0.0063	0.0051 *
Moon	98065-08-20 14:24 G	37538797.86	37538798.10	37538798.36	0.0064	0.0019
Earth	98065-08-20 17:45 G	37538798.01	37538798.24	37538798.50	0.0064	0.0021 *
Venus	98069-10-22 17:16 G	37540322.03	37540322.22	37540322.42	0.0065	0.0028
Venus	98070-06-04 21:21 G	37540547.18	37540547.39	37540547.60	0.0065	0.0014
Venus	98071-01-16 00:43 G	37540772.45	37540772.53	37540772.67	0.0065	0.0057
Mercury	98149-06-02 23:31 G	37569399.42	37569399.48	37569399.54	0.0084	0.0075
Mercury	98149-08-30 00:28 G	37569487.43	37569487.52	37569487.63	0.0084	0.0056
Mercury	98149-11-26 01:55 G	37569575.46	37569575.58	37569575.71	0.0083	0.0036
Mercury	98150-02-22 03:07 G	37569663.50	37569663.63	37569663.77	0.0083	0.0017
Mercury	98150-05-21 04:33 G	37569751.55	37569751.69	37569751.82	0.0083	0.0003
Mercury	98150-08-17 05:45 G	37569839.61	37569839.74	37569839.87	0.0083	0.0022
Mercury	98150-11-13 06:43 G	37569927.67	37569927.78	37569927.91	0.0083	0.0042
Mercury	98151-02-09 08:09 G	37570015.75	37570015.84	37570015.94	0.0083	0.0061
Mercury	98151-05-08 09:21 G	37570103.87	37570103.89	37570103.93	0.0083	0.0080
Mars	98152-05-21 23:31 G	37570483.14	37570483.48	37570483.83	0.0082	0.0012
Moon	98155-02-19 07:11 G	37571486.55	37571486.80	37571487.07	0.0081	0.0013
Earth	98155-02-19 10:48 G	37571486.70	37571486.95	37571487.22	0.0081	0.0016 *
Venus	98158-02-03 21:50 G	37572567.22	37572567.41	37572567.63	0.0079	0.0032
Venus	98158-09-17 08:09 G	37572792.68	37572792.84	37572793.04	0.0079	0.0047
Mercury	98302-04-06 04:19 G	37625222.60	37625222.68	37625222.80	0.0060	0.0052
Mercury	98302-07-03 05:31 G	37625310.62	37625310.73	37625310.89	0.0061	0.0042
Mercury	98302-09-29 07:11 G	37625398.64	37625398.80	37625398.96	0.0061	0.0031
Mercury	98302-12-26 08:24 G	37625486.68	37625486.85	37625487.03	0.0061	0.0021
Mercury	98303-03-24 09:35 G	37625574.72	37625574.90	37625575.09	0.0061	0.0011
Mercury	98303-06-20 11:02 G	37625662.77	37625662.96	37625663.15	0.0061	0.0001

Mercury	98303-09-16 12:14 G	37625750.82	37625751.01	37625751.19	0.0061	0.0010
Mercury	98303-12-13 13:26 G	37625838.88	37625839.06	37625839.24	0.0061	0.0020
Mercury	98304-03-10 14:24 G	37625926.95	37625927.10	37625927.27	0.0061	0.0031
Mercury	98304-06-06 15:35 G	37626015.03	37626015.15	37626015.30	0.0061	0.0041
Mercury	98304-09-02 16:33 G	37626103.12	37626103.19	37626103.31	0.0061	0.0052
Mars	98307-07-30 01:55 G	37627163.37	37627163.58	37627163.84	0.0062	0.0036
Earth	98311-08-25 00:14 G	37628650.31	37628650.51	37628650.74	0.0063	0.0035
Moon	98311-08-25 00:57 G	37628650.34	37628650.54	37628650.75	0.0063	0.0035 *
Moon	98312-08-25 09:07 G	37629016.70	37629016.88	37629017.11	0.0064	0.0040
Earth	98312-08-25 11:16 G	37629016.78	37629016.97	37629017.18	0.0064	0.0040 *
Venus	98315-11-23 14:09 G	37630202.06	37630202.09	37630202.19	0.0065	0.0062
Venus	98316-07-05 18:43 G	37630427.08	37630427.28	37630427.49	0.0065	0.0020
Venus	98317-02-15 22:19 G	37630652.24	37630652.43	37630652.65	0.0065	0.0022
Venus	98317-09-29 01:55 G	37630877.57	37630877.58	37630877.64	0.0065	0.0065
Mercury	98396-01-20 11:45 G	37659479.95	37659479.99	37659480.05	0.0084	0.0077
Mercury	98396-04-17 13:11 G	37659567.95	37659568.05	37659568.15	0.0084	0.0057
Mercury	98396-07-14 14:24 G	37659655.98	37659656.10	37659656.23	0.0083	0.0037
Mercury	98396-10-10 15:50 G	37659744.02	37659744.16	37659744.29	0.0083	0.0018
Mercury	98397-01-06 17:02 G	37659832.07	37659832.21	37659832.35	0.0083	0.0002
Mercury	98397-04-04 18:14 G	37659920.13	37659920.26	37659920.39	0.0083	0.0021
Mercury	98397-07-01 19:26 G	37660008.19	37660008.31	37660008.43	0.0083	0.0040
Mercury	98397-09-27 20:24 G	37660096.27	37660096.35	37660096.46	0.0083	0.0060
Mercury	98397-12-24 21:35 G	37660184.38	37660184.40	37660184.46	0.0083	0.0079
Moon	98402-02-23 06:28 G	37661705.51	37661705.77	37661706.03	0.0081	0.0020
Earth	98402-02-23 09:07 G	37661705.64	37661705.88	37661706.14	0.0081	0.0025 *
Venus	98404-10-16 21:50 G	37662672.21	37662672.41	37662672.64	0.0079	0.0025
Venus	98405-05-30 08:09 G	37662897.70	37662897.84	37662898.03	0.0079	0.0054
Mercury	98548-11-21 14:09 G	37715303.04	37715303.09	37715303.19	0.0060	0.0056
Mercury	98549-02-17 15:21 G	37715391.04	37715391.14	37715391.29	0.0061	0.0046
Mercury	98549-05-16 17:02 G	37715479.06	37715479.21	37715479.37	0.0061	0.0035

Mercury	98549-08-12 18:14 G	37715567.10	37715567.26	37715567.44	0.0061	0.0025
Mercury	98549-11-08 19:26 G	37715655.14	37715655.31	37715655.50	0.0061	0.0015
Mercury	98550-02-04 20:52 G	37715743.19	37715743.37	37715743.56	0.0061	0.0004
Mercury	98550-05-03 22:04 G	37715831.24	37715831.42	37715831.61	0.0061	0.0006
Mercury	98550-07-30 23:16 G	37715919.30	37715919.47	37715919.66	0.0061	0.0017
Mercury	98550-10-27 00:28 G	37716007.36	37716007.52	37716007.70	0.0061	0.0027
Mercury	98551-01-23 01:40 G	37716095.43	37716095.57	37716095.73	0.0061	0.0038
Mercury	98551-04-21 02:38 G	37716183.52	37716183.61	37716183.75	0.0061	0.0048
Mercury	98551-07-18 04:04 G	37716271.63	37716271.67	37716271.74	0.0061	0.0058
Mars	98553-12-20 02:24 G	37717157.31	37717157.60	37717157.89	0.0062	0.0002
Moon	98558-08-27 11:16 G	37718868.78	37718868.97	37718869.22	0.0063	0.0030
Earth	98558-08-27 13:11 G	37718868.83	37718869.05	37718869.29	0.0063	0.0027 *
Earth	98559-08-28 23:31 G	37719235.34	37719235.48	37719235.67	0.0064	0.0048
Moon	98559-08-29 00:00 G	37719235.34	37719235.50	37719235.67	0.0064	0.0050 *
Venus	98562-08-04 13:26 G	37720307.02	37720307.06	37720307.11	0.0065	0.0063
Venus	98563-03-17 17:02 G	37720532.02	37720532.21	37720532.43	0.0065	0.0022
Venus	98563-10-28 20:52 G	37720757.18	37720757.37	37720757.59	0.0065	0.0020
Venus	98564-06-10 00:43 G	37720982.49	37720982.53	37720982.61	0.0065	0.0063
Mercury	98642-12-05 00:43 G	37749648.46	37749648.53	37749648.63	0.0084	0.0067
Mercury	98643-03-03 02:09 G	37749736.48	37749736.59	37749736.71	0.0084	0.0047
Mercury	98643-05-30 03:21 G	37749824.52	37749824.64	37749824.78	0.0083	0.0028
Mercury	98643-08-26 04:48 G	37749912.56	37749912.70	37749912.83	0.0083	0.0008
Mercury	98643-11-22 06:00 G	37750000.62	37750000.75	37750000.89	0.0083	0.0012
Mercury	98644-02-18 07:11 G	37750088.68	37750088.80	37750088.93	0.0083	0.0031
Mercury	98644-05-16 08:24 G	37750176.75	37750176.85	37750176.96	0.0083	0.0050
Mercury	98644-08-12 09:35 G	37750264.83	37750264.90	37750264.98	0.0083	0.0069
Moon	98649-02-27 00:43 G	37751924.33	37751924.53	37751924.75	0.0080	0.0051
Earth	98649-02-27 02:24 G	37751924.41	37751924.60	37751924.82	0.0080	0.0049 *
Venus	98651-06-29 19:11 G	37752777.10	37752777.30	37752777.52	0.0079	0.0030
Venus	98652-02-10 05:31 G	37753002.57	37753002.73	37753002.92	0.0079	0.0049

Mercury	98795-10-07 00:57 G	37805471.46	37805471.54	37805471.65	0.0060	0.0052
Mercury	98796-01-03 02:09 G	37805559.47	37805559.59	37805559.74	0.0060	0.0042
Mercury	98796-03-31 03:21 G	37805647.50	37805647.64	37805647.82	0.0061	0.0032
Mercury	98796-06-27 05:02 G	37805735.53	37805735.71	37805735.89	0.0061	0.0021
Mercury	98796-09-23 06:14 G	37805823.57	37805823.76	37805823.95	0.0061	0.0011
Mercury	98796-12-20 07:26 G	37805911.62	37805911.81	37805912.00	0.0061	0.0001
Mercury	98797-03-18 08:38 G	37805999.68	37805999.86	37806000.05	0.0061	0.0010
Mercury	98797-06-14 09:50 G	37806087.74	37806087.91	37806088.10	0.0061	0.0020
Mercury	98797-09-10 10:48 G	37806175.81	37806175.95	37806176.13	0.0061	0.0031
Mercury	98797-12-07 12:14 G	37806263.88	37806264.01	37806264.16	0.0061	0.0041
Mercury	98798-03-05 13:40 G	37806351.98	37806352.07	37806352.17	0.0061	0.0051
Mars	98800-05-13 00:00 G	37807151.34	37807151.50	37807151.72	0.0062	0.0046
Moon	98805-08-30 21:07 G	37809087.17	37809087.38	37809087.64	0.0063	0.0022
Earth	98805-08-31 00:14 G	37809087.29	37809087.51	37809087.76	0.0063	0.0025 *
Earth	98806-09-01 11:16 G	37809453.81	37809453.97	37809454.13	0.0064	0.0050
Moon	98806-09-01 12:00 G	37809453.85	37809454.00	37809454.20	0.0064	0.0047 *
Venus	98809-11-27 14:09 G	37810636.91	37810637.09	37810637.30	0.0065	0.0029
Venus	98810-07-10 18:14 G	37810862.06	37810862.26	37810862.48	0.0065	0.0013
Venus	98811-02-20 21:50 G	37811087.32	37811087.41	37811087.55	0.0065	0.0056
Mercury	98889-10-18 12:43 G	37839816.96	37839817.03	37839817.13	0.0084	0.0066
Mercury	98890-01-14 14:24 G	37839904.98	37839905.10	37839905.21	0.0084	0.0046
Mercury	98890-04-12 15:35 G	37839993.02	37839993.15	37839993.28	0.0083	0.0026
Mercury	98890-07-09 16:48 G	37840081.07	37840081.20	37840081.34	0.0083	0.0007
Mercury	98890-10-05 18:00 G	37840169.12	37840169.25	37840169.39	0.0083	0.0012
Mercury	98891-01-01 19:11 G	37840257.18	37840257.30	37840257.43	0.0083	0.0031
Mercury	98891-03-30 20:09 G	37840345.25	37840345.34	37840345.46	0.0083	0.0051
Mercury	98891-06-26 21:21 G	37840433.33	37840433.39	37840433.48	0.0083	0.0070
Moon	98896-03-01 13:40 G	37842142.88	37842143.07	37842143.27	0.0080	0.0056
Earth	98896-03-01 13:26 G	37842142.90	37842143.06	37842143.28	0.0080	0.0055 *
Venus	98898-03-10 12:14 G	37842881.86	37842882.01	37842882.20	0.0079	0.0051

Venus 98898-10-21 23:02 G 37843107.26 37843107.46 37843107.68 0.0079 0.0028

# 100TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 100th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	99042-08-21 10:19	G	37895639.87	37895639.93	37895640.00	0.0060	0.0056	
Mercury	99042-11-17 11:31	G	37895727.86	37895727.98	37895728.11	0.0060	0.0046	
Mercury	99043-02-13 12:28	G	37895815.89	37895816.02	37895816.19	0.0060	0.0036	
Mercury	99043-05-12 13:55	G	37895903.92	37895904.08	37895904.26	0.0061	0.0026	
Mercury	99043-08-08 15:07	G	37895991.96	37895992.13	37895992.33	0.0061	0.0016	
Mercury	99043-11-04 16:33	G	37896080.01	37896080.19	37896080.38	0.0061	0.0005	
Mercury	99044-01-31 17:45	G	37896168.06	37896168.24	37896168.43	0.0061	0.0006	
Mercury	99044-04-28 18:57	G	37896256.12	37896256.29	37896256.48	0.0061	0.0016	
Mercury	99044-07-25 20:09	G	37896344.18	37896344.34	37896344.52	0.0061	0.0026	
Mercury	99044-10-21 21:35	G	37896432.25	37896432.40	37896432.55	0.0061	0.0036	
Mercury	99045-01-17 22:19	G	37896520.34	37896520.43	37896520.57	0.0061	0.0047	
Mercury	99045-04-15 23:45	G	37896608.44	37896608.49	37896608.57	0.0061	0.0057	
Moon	99052-09-03 02:09	G	37899305.41	37899305.59	37899305.81	0.0063	0.0037	
Earth	99052-09-03 05:59	G	37899305.55	37899305.75	37899305.97	0.0063	0.0036	*
Earth	99053-09-04 16:04	G	37899672.00	37899672.17	37899672.40	0.0064	0.0039	
Moon	99053-09-04 18:28	G	37899672.08	37899672.27	37899672.50	0.0064	0.0039	*
Venus	99056-08-09 07:55	G	37900741.71	37900741.83	37900742.00	0.0065	0.0048	

Venus	99057-03-22 11:59 G	37900966.79	37900967.00	37900967.22	0.0065	0.0007
Venus	99057-11-02 15:50 G	37901191.98	37901192.16	37901192.35	0.0065	0.0036
Mercury	99136-09-02 23:45 G	37929985.44	37929985.49	37929985.55	0.0084	0.0076
Mercury	99136-11-30 00:57 G	37930073.45	37930073.54	37930073.65	0.0084	0.0057
Mercury	99137-02-26 02:09 G	37930161.48	37930161.59	37930161.72	0.0084	0.0038
Mercury	99137-05-25 03:35 G	37930249.52	37930249.65	37930249.78	0.0083	0.0018
Mercury	99137-08-21 04:47 G	37930337.57	37930337.70	37930337.84	0.0083	0.0003
Mercury	99137-11-17 05:59 G	37930425.62	37930425.75	37930425.89	0.0083	0.0021
Mercury	99138-02-13 07:11 G	37930513.69	37930513.80	37930513.93	0.0083	0.0040
Mercury	99138-05-12 08:23 G	37930601.76	37930601.85	37930601.95	0.0083	0.0059
Mercury	99138-08-08 09:35 G	37930689.87	37930689.90	37930689.95	0.0083	0.0078
Mars	99139-11-07 03:35 G	37931145.37	37931145.65	37931145.96	0.0082	0.0046
Earth	99143-03-06 18:43 G	37932361.07	37932361.28	37932361.53	0.0080	0.0039
Moon	99143-03-06 20:09 G	37932361.11	37932361.34	37932361.60	0.0080	0.0035 *
Venus	99145-07-04 12:57 G	37933211.82	37933212.04	37933212.27	0.0079	0.0010
Venus	99146-02-14 23:16 G	37933437.38	37933437.47	37933437.59	0.0079	0.0069
Mercury	99289-09-30 19:40 G	37985896.25	37985896.32	37985896.42	0.0060	0.0054
Mercury	99289-12-27 20:52 G	37985984.26	37985984.37	37985984.52	0.0060	0.0044
Mercury	99290-03-25 22:04 G	37986072.28	37986072.42	37986072.60	0.0060	0.0034
Mercury	99290-06-21 23:45 G	37986160.31	37986160.49	37986160.67	0.0061	0.0023
Mercury	99290-09-18 00:57 G	37986248.36	37986248.54	37986248.73	0.0061	0.0013
Mercury	99290-12-15 02:09 G	37986336.40	37986336.59	37986336.78	0.0061	0.0003
Mercury	99291-03-13 03:21 G	37986424.46	37986424.64	37986424.83	0.0061	0.0008
Mercury	99291-06-09 04:33 G	37986512.52	37986512.69	37986512.88	0.0061	0.0018
Mercury	99291-09-05 05:59 G	37986600.58	37986600.75	37986600.92	0.0061	0.0028
Mercury	99291-12-02 06:43 G	37986688.66	37986688.78	37986688.95	0.0061	0.0039
Mercury	99292-02-28 08:09 G	37986776.74	37986776.84	37986776.97	0.0061	0.0049
Mercury	99292-05-26 09:35 G	37986864.87	37986864.90	37986864.95	0.0061	0.0059
Mars	99295-01-15 06:14 G	37987828.51	37987828.76	37987829.05	0.0062	0.0021
Moon	99299-09-06 04:47 G	37989523.62	37989523.70	37989523.85	0.0063	0.0056



Earth	99299-09-06 08:38 G	37989523.75	37989523.86	37989524.02	0.0063	0.0054	*
Earth	99300-09-07 19:26 G	37989890.09	37989890.31	37989890.57	0.0064	0.0021	
Moon	99300-09-07 22:19 G	37989890.21	37989890.43	37989890.70	0.0064	0.0024	*
Venus	99303-12-03 04:04 G	37991071.50	37991071.67	37991071.88	0.0065	0.0032	
Venus	99304-07-15 08:23 G	37991296.63	37991296.85	37991297.06	0.0065	0.0010	
Venus	99305-02-25 11:45 G	37991521.88	37991521.99	37991522.14	0.0065	0.0052	
Mercury	99383-10-14 10:33 G	38020241.91	38020241.94	38020242.00	0.0084	0.0079	
Mercury	99384-01-10 11:59 G	38020329.91	38020330.00	38020330.10	0.0084	0.0059	
Mercury	99384-04-07 13:11 G	38020417.94	38020418.05	38020418.18	0.0084	0.0040	
Mercury	99384-07-04 14:23 G	38020505.98	38020506.10	38020506.24	0.0083	0.0021	
Mercury	99384-09-30 15:50 G	38020594.02	38020594.16	38020594.30	0.0083	0.0001	
Mercury	99384-12-27 17:02 G	38020682.08	38020682.21	38020682.34	0.0083	0.0018	
Mercury	99385-03-25 18:14 G	38020770.14	38020770.26	38020770.38	0.0083	0.0037	
Mercury	99385-06-21 19:11 G	38020858.22	38020858.30	38020858.41	0.0083	0.0057	
Mercury	99385-09-17 20:23 G	38020946.31	38020946.35	38020946.42	0.0083	0.0076	
Earth	99390-03-08 17:16 G	38022578.96	38022579.22	38022579.49	0.0080	0.0002	
Moon	99390-03-08 20:09 G	38022579.07	38022579.34	38022579.61	0.0080	0.0003	*
Venus	99392-03-14 21:50 G	38023316.31	38023316.41	38023316.56	0.0079	0.0067	
Venus	99392-10-26 08:52 G	38023541.65	38023541.87	38023542.10	0.0079	0.0014	
Mercury	99536-11-12 03:50 G	38076152.63	38076152.66	38076152.72	0.0060	0.0058	
Mercury	99537-02-08 05:02 G	38076240.62	38076240.71	38076240.84	0.0060	0.0049	
Mercury	99537-05-07 06:14 G	38076328.63	38076328.76	38076328.93	0.0060	0.0039	
Mercury	99537-08-03 07:26 G	38076416.67	38076416.81	38076417.00	0.0060	0.0029	
Mercury	99537-10-30 09:07 G	38076504.70	38076504.88	38076505.07	0.0060	0.0018	
Mercury	99538-01-26 10:19 G	38076592.75	38076592.93	38076593.12	0.0061	0.0008	
Mercury	99538-04-24 11:45 G	38076680.80	38076680.99	38076681.18	0.0061	0.0003	
Mercury	99538-07-21 12:43 G	38076768.85	38076769.03	38076769.22	0.0061	0.0013	
Mercury	99538-10-17 14:09 G	38076856.92	38076857.09	38076857.27	0.0061	0.0023	
Mercury	99539-01-13 14:52 G	38076944.99	38076945.12	38076945.30	0.0061	0.0034	
Mercury	99539-04-11 16:19 G	38077033.07	38077033.18	38077033.33	0.0061	0.0044	

Mercury	99539-07-08 17:31 G	38077121.16	38077121.23	38077121.33	0.0061	0.0054
Earth	99547-09-11 17:45 G	38080108.00	38080108.24	38080108.50	0.0063	0.0011
Moon	99547-09-11 21:21 G	38080108.14	38080108.39	38080108.64	0.0063	0.0014 *
Earth	99548-09-12 04:47 G	38080474.70	38080474.70	38080474.71	0.0064	0.0064
Venus	99551-03-27 21:21 G	38081401.20	38081401.39	38081401.60	0.0065	0.0027
Venus	99551-11-08 00:57 G	38081626.34	38081626.54	38081626.76	0.0065	0.0015
Venus	99552-06-20 04:33 G	38081851.61	38081851.69	38081851.82	0.0065	0.0057
Mercury	99631-02-20 21:35 G	38110586.35	38110586.40	38110586.47	0.0084	0.0074
Mercury	99631-05-19 23:02 G	38110674.36	38110674.46	38110674.56	0.0084	0.0054
Mercury	99631-08-16 00:14 G	38110762.39	38110762.51	38110762.64	0.0084	0.0035
Mercury	99631-11-12 01:26 G	38110850.43	38110850.56	38110850.70	0.0083	0.0016
Mercury	99632-02-08 02:52 G	38110938.48	38110938.62	38110938.75	0.0083	0.0004
Mercury	99632-05-06 03:50 G	38111026.54	38111026.66	38111026.80	0.0083	0.0024
Mercury	99632-08-02 05:16 G	38111114.60	38111114.72	38111114.84	0.0083	0.0042
Mercury	99632-10-29 06:28 G	38111202.68	38111202.77	38111202.86	0.0083	0.0061
Mercury	99633-01-25 07:40 G	38111290.79	38111290.82	38111290.85	0.0083	0.0080
Earth	99637-03-11 07:55 G	38112796.68	38112796.83	38112797.02	0.0081	0.0061
Moon	99637-03-11 11:31 G	38112796.81	38112796.98	38112797.17	0.0081	0.0059 *
Venus	99639-07-08 13:55 G	38113645.96	38113646.08	38113646.25	0.0079	0.0062
Venus	99640-02-19 00:57 G	38113871.33	38113871.54	38113871.77	0.0079	0.0019
Mercury	99784-03-20 12:57 G	38166496.98	38166497.04	38166497.12	0.0060	0.0056
Mercury	99784-06-16 14:09 G	38166584.98	38166585.09	38166585.22	0.0060	0.0046
Mercury	99784-09-12 15:21 G	38166673.00	38166673.14	38166673.31	0.0060	0.0036
Mercury	99784-12-09 16:47 G	38166761.03	38166761.20	38166761.38	0.0060	0.0025
Mercury	99785-03-07 17:59 G	38166849.07	38166849.25	38166849.44	0.0060	0.0015
Mercury	99785-06-03 19:11 G	38166937.12	38166937.30	38166937.50	0.0061	0.0006
Mercury	99785-08-30 20:38 G	38167025.17	38167025.36	38167025.55	0.0061	0.0005
Mercury	99785-11-26 21:35 G	38167113.23	38167113.40	38167113.60	0.0061	0.0016
Mercury	99786-02-22 22:47 G	38167201.29	38167201.45	38167201.64	0.0061	0.0026
Mercury	99786-05-21 23:59 G	38167289.37	38167289.50	38167289.67	0.0061	0.0036

Mercury	99786-08-18 01:26 G	38167377.45	38167377.56	38167377.69	0.0061	0.0046
Mercury	99786-11-14 02:52 G	38167465.55	38167465.62	38167465.69	0.0061	0.0056
Mars	99789-09-18 17:45 G	38168505.01	38168505.24	38168505.51	0.0062	0.0030
Earth	99794-09-13 13:11 G	38170325.91	38170326.05	38170326.26	0.0063	0.0047
Moon	99794-09-13 16:47 G	38170326.05	38170326.20	38170326.40	0.0063	0.0046 *
Moon	99795-09-14 20:52 G	38170692.16	38170692.37	38170692.62	0.0064	0.0029
Earth	99795-09-15 00:14 G	38170692.30	38170692.51	38170692.76	0.0064	0.0028 *
Venus	99798-07-19 12:57 G	38171730.87	38171731.04	38171731.26	0.0065	0.0027
Venus	99799-03-01 17:02 G	38171956.01	38171956.21	38171956.43	0.0065	0.0015
Venus	99799-10-12 20:23 G	38172181.27	38172181.35	38172181.47	0.0065	0.0057
Mercury	99878-06-30 07:26 G	38200930.78	38200930.81	38200930.88	0.0084	0.0078
Mercury	99878-09-26 09:07 G	38201018.79	38201018.88	38201018.98	0.0084	0.0058
Mercury	99878-12-23 10:19 G	38201106.81	38201106.93	38201107.05	0.0084	0.0039
Mercury	99879-03-21 11:31 G	38201194.85	38201194.98	38201195.12	0.0083	0.0019
Mercury	99879-06-17 12:57 G	38201282.90	38201283.04	38201283.17	0.0083	0.0002
Mercury	99879-09-13 14:09 G	38201370.96	38201371.09	38201371.22	0.0083	0.0019
Mercury	99879-12-10 15:21 G	38201459.02	38201459.14	38201459.26	0.0083	0.0038
Mercury	99880-03-07 16:33 G	38201547.09	38201547.19	38201547.29	0.0083	0.0057
Mercury	99880-06-03 17:45 G	38201635.19	38201635.24	38201635.29	0.0083	0.0076
Moon	99885-03-15 22:19 G	38203381.19	38203381.43	38203381.69	0.0080	0.0021
Earth	99885-03-16 00:57 G	38203381.28	38203381.54	38203381.80	0.0080	0.0017 *
Venus	99886-10-31 02:52 G	38203975.54	38203975.62	38203975.73	0.0079	0.0072
Venus	99887-06-13 13:55 G	38204200.86	38204201.08	38204201.30	0.0079	0.0009

# 101ST MILLENNIUM CE

This is a list of transits visible from Pluto in the 101st millennium CE.

PLANET	MAX-	C	START	MAX	END	SUNRAD	DEPTH	S
	TRANSIT							
	TIME							
Mercury	100031-07-28 20:09	G	38256841.34	38256841.34	38256841.40	0.0060	0.0060	
Mercury	100031-10-24 21:35	G	38256929.31	38256929.40	38256929.53	0.0060	0.0049	
Mercury	100032-01-20 22:47	G	38257017.33	38257017.45	38257017.62	0.0060	0.0040	
Mercury	100032-04-18 00:14	G	38257105.36	38257105.51	38257105.69	0.0060	0.0029	
Mercury	100032-07-15 01:55	G	38257193.40	38257193.58	38257193.76	0.0060	0.0019	
Mercury	100032-10-11 03:07	G	38257281.44	38257281.63	38257281.82	0.0060	0.0009	
Mercury	100033-01-07 04:19	G	38257369.49	38257369.68	38257369.87	0.0061	0.0002	
Mercury	100033-04-05 05:31	G	38257457.55	38257457.73	38257457.92	0.0061	0.0012	
Mercury	100033-07-02 06:57	G	38257545.61	38257545.79	38257545.97	0.0061	0.0022	
Mercury	100033-09-28 07:40	G	38257633.68	38257633.82	38257634.00	0.0061	0.0033	
Mercury	100033-12-25 08:52	G	38257721.76	38257721.87	38257722.03	0.0061	0.0043	
Mercury	100034-03-23 10:19	G	38257809.86	38257809.93	38257810.04	0.0061	0.0053	
Moon	100042-09-17 13:26	G	38260909.83	38260910.06	38260910.31	0.0063	0.0022	
Earth	100042-09-17 16:47	G	38260909.97	38260910.20	38260910.46	0.0063	0.0019	*
Earth	100043-09-19 03:50	G	38261276.56	38261276.66	38261276.79	0.0064	0.0056	
Moon	100043-09-19 06:43	G	38261276.69	38261276.78	38261276.88	0.0064	0.0059	*
Venus	100045-11-11 02:38	G	38262060.45	38262060.61	38262060.82	0.0065	0.0035	
Venus	100046-06-24 06:57	G	38262285.58	38262285.79	38262286.01	0.0065	0.0007	
Venus	100047-02-04 10:04	G	38262510.81	38262510.92	38262511.09	0.0065	0.0049	
Mercury	100126-02-02 18:14	G	38291363.20	38291363.26	38291363.35	0.0084	0.0069	
Mercury	100126-05-01 19:55	G	38291451.22	38291451.33	38291451.44	0.0084	0.0049	
Mercury	100126-07-28 21:07	G	38291539.25	38291539.38	38291539.51	0.0084	0.0030	
Mercury	100126-10-24 22:19	G	38291627.30	38291627.43	38291627.57	0.0083	0.0010	
Mercury	100127-01-20 23:31	G	38291715.35	38291715.48	38291715.62	0.0083	0.0009	
Mercury	100127-04-19 00:43	G	38291803.40	38291803.53	38291803.66	0.0083	0.0028	
Mercury	100127-07-16 01:40	G	38291891.47	38291891.57	38291891.69	0.0083	0.0047	

Mercury	100127-10-12 02:52 G	38291979.55	38291979.62	38291979.72	0.0083	0.0066
Mars	100129-03-09 13:11 G	38292493.75	38292494.05	38292494.38	0.0082	0.0036
Moon	100132-03-18 02:38 G	38293598.56	38293598.61	38293598.73	0.0081	0.0076
Earth	100132-03-18 05:45 G	38293598.67	38293598.74	38293598.86	0.0081	0.0075 *
Venus	100134-10-06 00:14 G	38294530.29	38294530.51	38294530.73	0.0079	0.0012
Venus	100135-05-19 10:04 G	38294755.84	38294755.92	38294756.07	0.0079	0.0068
Mercury	100279-03-03 05:02 G	38347273.65	38347273.71	38347273.81	0.0060	0.0054
Mercury	100279-05-30 06:14 G	38347361.65	38347361.76	38347361.91	0.0060	0.0045
Mercury	100279-08-26 07:40 G	38347449.68	38347449.82	38347449.99	0.0060	0.0034
Mercury	100279-11-22 08:52 G	38347537.71	38347537.87	38347538.06	0.0060	0.0024
Mercury	100280-02-18 10:33 G	38347625.75	38347625.94	38347626.12	0.0060	0.0014
Mercury	100280-05-16 11:45 G	38347713.80	38347713.99	38347714.18	0.0060	0.0004
Mercury	100280-08-12 12:57 G	38347801.86	38347802.04	38347802.23	0.0060	0.0007
Mercury	100280-11-08 14:09 G	38347889.91	38347890.09	38347890.28	0.0061	0.0017
Mercury	100281-02-04 15:21 G	38347977.98	38347978.14	38347978.32	0.0061	0.0027
Mercury	100281-05-03 16:47 G	38348066.05	38348066.20	38348066.35	0.0061	0.0037
Mercury	100281-07-30 17:31 G	38348154.14	38348154.23	38348154.37	0.0061	0.0048
Mercury	100281-10-26 18:57 G	38348242.25	38348242.29	38348242.37	0.0061	0.0058
Mars	100284-05-22 11:59 G	38349180.71	38349181.00	38349181.29	0.0062	0.0003
Earth	100290-09-21 18:57 G	38351494.04	38351494.29	38351494.55	0.0064	0.0007
Moon	100290-09-21 22:19 G	38351494.17	38351494.43	38351494.69	0.0064	0.0005 *
Venus	100293-03-05 15:35 G	38352390.01	38352390.15	38352390.32	0.0064	0.0046
Venus	100293-10-16 19:26 G	38352615.10	38352615.31	38352615.53	0.0065	0.0005
Venus	100294-05-29 23:02 G	38352840.30	38352840.46	38352840.65	0.0065	0.0037
Mercury	100373-09-08 04:33 G	38381795.61	38381795.69	38381795.78	0.0084	0.0066
Mercury	100373-12-05 05:45 G	38381883.63	38381883.74	38381883.86	0.0084	0.0047
Mercury	100374-03-03 06:57 G	38381971.67	38381971.79	38381971.92	0.0084	0.0028
Mercury	100374-05-30 08:23 G	38382059.71	38382059.85	38382059.98	0.0083	0.0008
Mercury	100374-08-26 09:35 G	38382147.77	38382147.90	38382148.03	0.0083	0.0011
Mercury	100374-11-22 10:33 G	38382235.82	38382235.94	38382236.08	0.0083	0.0030

Mercury	100375-02-18 11:45 G	38382323.89	38382323.99	38382324.11	0.0083	0.0049
Mercury	100375-05-17 12:57 G	38382411.98	38382412.04	38382412.13	0.0083	0.0068
Earth	100380-03-22 14:23 G	38384182.87	38384183.10	38384183.37	0.0080	0.0024
Moon	100380-03-22 17:16 G	38384182.96	38384183.22	38384183.48	0.0080	0.0020 *
Venus	100382-01-28 08:09 G	38384859.66	38384859.84	38384860.03	0.0079	0.0044
Venus	100382-09-10 18:28 G	38385085.09	38385085.27	38385085.49	0.0079	0.0036
Mercury	100526-10-06 12:28 G	38437705.97	38437706.02	38437706.12	0.0060	0.0055
Mercury	100527-01-02 13:40 G	38437793.97	38437794.07	38437794.22	0.0060	0.0045
Mercury	100527-03-31 15:35 G	38437881.99	38437882.15	38437882.30	0.0060	0.0035
Mercury	100527-06-27 16:47 G	38437970.03	38437970.20	38437970.38	0.0060	0.0025
Mercury	100527-09-23 17:59 G	38438058.07	38438058.25	38438058.44	0.0060	0.0015
Mercury	100527-12-20 19:26 G	38438146.12	38438146.31	38438146.50	0.0060	0.0005
Mercury	100528-03-17 20:38 G	38438234.17	38438234.36	38438234.55	0.0060	0.0006
Mercury	100528-06-13 21:50 G	38438322.23	38438322.41	38438322.60	0.0061	0.0016
Mercury	100528-09-09 22:47 G	38438410.29	38438410.45	38438410.64	0.0061	0.0027
Mercury	100528-12-06 23:59 G	38438498.37	38438498.50	38438498.67	0.0061	0.0037
Mercury	100529-03-05 01:11 G	38438586.45	38438586.55	38438586.69	0.0061	0.0047
Mercury	100529-06-01 02:38 G	38438674.56	38438674.61	38438674.69	0.0061	0.0057
Earth	100537-09-24 06:28 G	38441711.64	38441711.77	38441711.93	0.0063	0.0052
Moon	100537-09-24 09:35 G	38441711.80	38441711.90	38441712.06	0.0063	0.0055 *
Moon	100538-09-25 15:07 G	38442077.93	38442078.13	38442078.38	0.0064	0.0026
Earth	100538-09-25 17:31 G	38442078.00	38442078.23	38442078.48	0.0064	0.0022 *
Venus	100541-02-08 06:14 G	38442944.56	38442944.76	38442944.97	0.0064	0.0024
Venus	100541-09-21 09:50 G	38443169.71	38443169.91	38443170.13	0.0065	0.0018
Venus	100542-05-04 13:26 G	38443394.99	38443395.06	38443395.16	0.0065	0.0059
Mercury	100621-04-13 14:09 G	38472228.01	38472228.09	38472228.16	0.0084	0.0069
Mercury	100621-07-10 15:07 G	38472316.03	38472316.13	38472316.25	0.0084	0.0050
Mercury	100621-10-06 16:33 G	38472404.07	38472404.19	38472404.32	0.0084	0.0031
Mercury	100622-01-02 17:45 G	38472492.11	38472492.24	38472492.38	0.0083	0.0012
Mercury	100622-03-31 18:57 G	38472580.16	38472580.29	38472580.43	0.0083	0.0008

Mercury	100622-06-27 20:09 G	38472668.22	38472668.34	38472668.47	0.0083	0.0027
Mercury	100622-09-23 21:21 G	38472756.28	38472756.39	38472756.51	0.0083	0.0046
Mercury	100622-12-20 22:19 G	38472844.36	38472844.43	38472844.53	0.0083	0.0065
Moon	100628-03-26 18:57 G	38474767.06	38474767.29	38474767.55	0.0080	0.0018
Earth	100628-03-26 19:55 G	38474767.08	38474767.33	38474767.59	0.0080	0.0017 *
Venus	100630-01-03 00:43 G	38475414.31	38475414.53	38475414.76	0.0079	0.0004
Jupiter	100630-08-09 17:59 G	38475632.80	38475633.25	38475633.78	0.0079	0.0039
Venus	100630-08-16 10:47 G	38475639.92	38475639.95	38475640.04	0.0079	0.0076
Mercury	100774-05-11 19:26 G	38528138.29	38528138.31	38528138.39	0.0060	0.0058
Mercury	100774-08-07 20:52 G	38528226.28	38528226.37	38528226.51	0.0060	0.0048
Mercury	100774-11-03 22:04 G	38528314.30	38528314.42	38528314.59	0.0060	0.0038
Mercury	100775-01-30 23:30 G	38528402.33	38528402.48	38528402.67	0.0060	0.0028
Mercury	100775-04-29 01:11 G	38528490.37	38528490.55	38528490.73	0.0060	0.0018
Mercury	100775-07-26 02:23 G	38528578.41	38528578.60	38528578.79	0.0060	0.0008
Mercury	100775-10-22 03:35 G	38528666.46	38528666.65	38528666.85	0.0060	0.0003
Mercury	100776-01-18 05:02 G	38528754.52	38528754.71	38528754.89	0.0060	0.0013
Mercury	100776-04-15 06:14 G	38528842.59	38528842.76	38528842.94	0.0061	0.0023
Mercury	100776-07-12 06:57 G	38528930.66	38528930.79	38528930.97	0.0061	0.0034
Mercury	100776-10-08 08:23 G	38529018.74	38529018.85	38529019.00	0.0061	0.0044
Mercury	100777-01-04 09:35 G	38529106.83	38529106.90	38529107.01	0.0061	0.0054
Moon	100785-09-28 00:57 G	38532295.39	38532295.54	38532295.75	0.0063	0.0044
Earth	100785-09-28 03:06 G	38532295.46	38532295.63	38532295.84	0.0063	0.0042 *
Earth	100786-09-29 13:40 G	38532661.88	38532662.07	38532662.32	0.0064	0.0033
Moon	100786-09-29 14:09 G	38532661.89	38532662.09	38532662.34	0.0064	0.0034 *
Venus	100788-06-02 15:21 G	38533274.01	38533274.14	38533274.30	0.0064	0.0048
Venus	100789-01-13 19:26 G	38533499.09	38533499.31	38533499.52	0.0065	0.0007
Venus	100789-08-26 22:47 G	38533724.28	38533724.45	38533724.65	0.0065	0.0035
Mercury	100868-11-15 22:18 G	38562660.41	38562660.43	38562660.47	0.0084	0.0082
Mercury	100869-02-11 23:45 G	38562748.41	38562748.49	38562748.58	0.0084	0.0062
Mercury	100869-05-11 00:57 G	38562836.43	38562836.54	38562836.66	0.0084	0.0043

Mercury	100869-08-07 02:23 G	38562924.47	38562924.60	38562924.73	0.0084	0.0024
Mercury	100869-11-03 03:35 G	38563012.51	38563012.65	38563012.78	0.0083	0.0005
Mercury	100870-01-30 04:47 G	38563100.57	38563100.70	38563100.83	0.0083	0.0015
Mercury	100870-04-28 05:59 G	38563188.63	38563188.75	38563188.87	0.0083	0.0033
Mercury	100870-07-25 07:11 G	38563276.70	38563276.80	38563276.91	0.0083	0.0052
Mercury	100870-10-21 08:23 G	38563364.78	38563364.85	38563364.92	0.0083	0.0071
Mars	100872-02-17 06:57 G	38563848.45	38563848.79	38563849.15	0.0082	0.0014
Moon	100876-03-29 18:42 G	38565351.04	38565351.28	38565351.53	0.0080	0.0034
Earth	100876-03-29 19:26 G	38565351.08	38565351.31	38565351.54	0.0080	0.0038 *
Venus	100877-04-26 02:52 G	38565743.49	38565743.62	38565743.79	0.0079	0.0060
Venus	100877-12-07 13:40 G	38565968.87	38565969.07	38565969.30	0.0079	0.0022

# 102ND MILLENNIUM CE

This is a list of transits visible from Pluto in the 102nd millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	101022-03-13 03:06 G	38618658.58	38618658.63	38618658.71	0.0060	0.0056		
Mercury	101022-06-09 04:18 G	38618746.57	38618746.68	38618746.81	0.0060	0.0047		
Mercury	101022-09-05 05:45 G	38618834.60	38618834.74	38618834.90	0.0060	0.0036		
Mercury	101022-12-02 06:57 G	38618922.63	38618922.79	38618922.97	0.0060	0.0027		
Mercury	101023-02-28 08:09 G	38619010.67	38619010.84	38619011.04	0.0060	0.0017		
Mercury	101023-05-27 09:35 G	38619098.71	38619098.90	38619099.09	0.0060	0.0006		
Mercury	101023-08-23 10:47 G	38619186.77	38619186.95	38619187.15	0.0060	0.0004		



Mercury	101023-11-19 12:14 G	38619274.82	38619275.01	38619275.20	0.0060	0.0014
Mercury	101024-02-15 13:11 G	38619362.89	38619363.05	38619363.24	0.0061	0.0024
Mercury	101024-05-13 14:23 G	38619450.96	38619451.10	38619451.27	0.0061	0.0035
Mercury	101024-08-09 15:35 G	38619539.04	38619539.15	38619539.30	0.0061	0.0045
Mercury	101024-11-05 17:02 G	38619627.14	38619627.21	38619627.30	0.0061	0.0055
Mars	101027-05-06 00:28 G	38620538.27	38620538.52	38620538.77	0.0061	0.0029
Earth	101033-10-01 20:09 G	38622879.16	38622879.34	38622879.55	0.0063	0.0041
Moon	101033-10-01 20:38 G	38622879.18	38622879.36	38622879.60	0.0063	0.0039 *
Earth	101034-10-03 06:57 G	38623245.58	38623245.79	38623246.02	0.0064	0.0033
Moon	101034-10-03 08:23 G	38623245.64	38623245.85	38623246.08	0.0064	0.0030 *
Venus	101036-05-08 02:23 G	38623828.44	38623828.60	38623828.78	0.0064	0.0039
Venus	101036-12-19 06:14 G	38624053.55	38624053.76	38624053.98	0.0065	0.0002
Venus	101037-08-01 09:35 G	38624278.76	38624278.90	38624279.08	0.0065	0.0044
Mercury	101116-09-18 07:54 G	38653180.79	38653180.83	38653180.86	0.0084	0.0080
Mercury	101116-12-15 08:52 G	38653268.79	38653268.87	38653268.97	0.0084	0.0061
Mercury	101117-03-13 10:04 G	38653356.81	38653356.92	38653357.05	0.0084	0.0042
Mercury	101117-06-09 11:30 G	38653444.85	38653444.98	38653445.11	0.0084	0.0023
Mercury	101117-09-05 12:42 G	38653532.90	38653533.03	38653533.17	0.0083	0.0004
Mercury	101117-12-02 13:54 G	38653620.95	38653621.08	38653621.22	0.0083	0.0016
Mercury	101118-02-28 15:06 G	38653709.01	38653709.13	38653709.26	0.0083	0.0035
Mercury	101118-05-27 16:18 G	38653797.08	38653797.18	38653797.29	0.0083	0.0053
Mercury	101118-08-23 17:30 G	38653885.17	38653885.23	38653885.30	0.0083	0.0072
Earth	101124-04-03 15:21 G	38655934.95	38655935.14	38655935.36	0.0080	0.0049
Moon	101124-04-03 17:59 G	38655935.06	38655935.25	38655935.47	0.0080	0.0048 *
Venus	101125-04-01 14:23 G	38656297.92	38656298.10	38656298.30	0.0079	0.0044
Venus	101125-11-13 00:42 G	38656523.35	38656523.53	38656523.75	0.0079	0.0038
Mercury	101270-01-11 09:35 G	38709178.87	38709178.90	38709178.96	0.0060	0.0058
Mercury	101270-04-09 10:47 G	38709266.86	38709266.95	38709267.08	0.0060	0.0048
Mercury	101270-07-06 12:14 G	38709354.87	38709355.01	38709355.17	0.0060	0.0038
Mercury	101270-10-02 13:26 G	38709442.90	38709443.06	38709443.24	0.0060	0.0028

Mercury	101270-12-29 14:52 G	38709530.94	38709531.12	38709531.31	0.0060	0.0018
Mercury	101271-03-27 16:04 G	38709618.99	38709619.17	38709619.37	0.0060	0.0009
Mercury	101271-06-23 17:30 G	38709707.04	38709707.23	38709707.42	0.0060	0.0002
Mercury	101271-09-19 18:28 G	38709795.10	38709795.27	38709795.47	0.0060	0.0013
Mercury	101271-12-16 19:40 G	38709883.16	38709883.32	38709883.51	0.0060	0.0023
Mercury	101272-03-13 20:52 G	38709971.23	38709971.37	38709971.55	0.0061	0.0033
Mercury	101272-06-09 22:18 G	38710059.31	38710059.43	38710059.58	0.0061	0.0043
Mercury	101272-09-05 23:30 G	38710147.41	38710147.48	38710147.59	0.0061	0.0053
Mars	101275-08-15 06:42 G	38711220.50	38711220.78	38711221.07	0.0061	0.0008
Earth	101281-10-04 10:18 G	38713462.79	38713462.93	38713463.14	0.0063	0.0047
Moon	101281-10-04 11:30 G	38713462.83	38713462.98	38713463.18	0.0063	0.0045 *
Moon	101282-10-05 18:57 G	38713829.07	38713829.29	38713829.55	0.0064	0.0027
Earth	101282-10-05 21:35 G	38713829.19	38713829.40	38713829.65	0.0064	0.0028 *
Venus	101284-04-11 11:59 G	38714382.83	38714383.00	38714383.19	0.0064	0.0036
Venus	101284-11-22 15:50 G	38714607.95	38714608.16	38714608.38	0.0065	0.0005
Venus	101285-07-05 19:11 G	38714833.17	38714833.30	38714833.47	0.0065	0.0047
Mercury	101364-10-15 17:02 G	38743789.14	38743789.21	38743789.28	0.0084	0.0071
Mercury	101365-01-11 18:14 G	38743877.16	38743877.26	38743877.37	0.0084	0.0052
Mercury	101365-04-09 19:26 G	38743965.19	38743965.31	38743965.44	0.0084	0.0033
Mercury	101365-07-06 20:52 G	38744053.23	38744053.37	38744053.50	0.0083	0.0014
Mercury	101365-10-02 22:04 G	38744141.28	38744141.42	38744141.55	0.0083	0.0006
Mercury	101365-12-29 23:16 G	38744229.34	38744229.47	38744229.60	0.0083	0.0025
Mercury	101366-03-28 00:28 G	38744317.40	38744317.52	38744317.63	0.0083	0.0043
Mercury	101366-06-24 01:26 G	38744405.48	38744405.56	38744405.66	0.0083	0.0062
Mercury	101366-09-20 02:38 G	38744493.59	38744493.61	38744493.65	0.0083	0.0081
Moon	101372-04-06 01:54 G	38746518.37	38746518.58	38746518.83	0.0080	0.0042
Earth	101372-04-06 05:16 G	38746518.49	38746518.72	38746518.95	0.0080	0.0038 *
Venus	101373-03-05 21:50 G	38746852.23	38746852.41	38746852.59	0.0079	0.0046
Venus	101373-10-17 08:23 G	38747077.65	38747077.85	38747078.06	0.0079	0.0034
Mercury	101518-02-09 16:18 G	38799787.13	38799787.18	38799787.28	0.0060	0.0055

Mercury	101518-05-08 17:45 G	38799875.13	38799875.24	38799875.39	0.0060	0.0045
Mercury	101518-08-04 18:57 G	38799963.16	38799963.29	38799963.47	0.0060	0.0035
Mercury	101518-10-31 20:23 G	38800051.19	38800051.35	38800051.54	0.0060	0.0025
Mercury	101519-01-27 21:50 G	38800139.23	38800139.41	38800139.60	0.0060	0.0015
Mercury	101519-04-25 23:02 G	38800227.28	38800227.46	38800227.66	0.0060	0.0006
Mercury	101519-07-23 00:28 G	38800315.33	38800315.52	38800315.71	0.0060	0.0005
Mercury	101519-10-19 01:40 G	38800403.39	38800403.57	38800403.76	0.0060	0.0015
Mercury	101520-01-15 02:52 G	38800491.45	38800491.62	38800491.80	0.0060	0.0026
Mercury	101520-04-12 04:04 G	38800579.53	38800579.67	38800579.83	0.0061	0.0036
Mercury	101520-07-09 05:16 G	38800667.61	38800667.72	38800667.86	0.0061	0.0046
Mercury	101520-10-05 06:42 G	38800755.72	38800755.78	38800755.86	0.0061	0.0056
Mars	101523-11-26 08:09 G	38801902.61	38801902.84	38801903.10	0.0062	0.0031
Moon	101529-10-08 20:38 G	38804046.32	38804046.36	38804046.44	0.0063	0.0062
Earth	101529-10-08 22:18 G	38804046.35	38804046.43	38804046.51	0.0063	0.0060 *
Earth	101530-10-10 08:52 G	38804412.63	38804412.87	38804413.13	0.0064	0.0014
Moon	101530-10-10 11:45 G	38804412.76	38804412.99	38804413.24	0.0064	0.0016 *
Venus	101532-03-17 19:40 G	38804937.16	38804937.32	38804937.50	0.0064	0.0040
Venus	101532-10-28 23:30 G	38805162.26	38805162.48	38805162.69	0.0064	0.0002
Venus	101533-06-11 02:23 G	38805387.46	38805387.60	38805387.79	0.0065	0.0043
Mercury	101612-11-13 01:40 G	38834397.50	38834397.57	38834397.66	0.0084	0.0067
Mercury	101613-02-09 02:52 G	38834485.52	38834485.62	38834485.74	0.0084	0.0048
Mercury	101613-05-08 04:04 G	38834573.55	38834573.67	38834573.81	0.0084	0.0029
Mercury	101613-08-04 05:30 G	38834661.60	38834661.73	38834661.86	0.0083	0.0009
Mercury	101613-10-31 06:42 G	38834749.65	38834749.78	38834749.92	0.0083	0.0010
Mercury	101614-01-27 07:54 G	38834837.71	38834837.83	38834837.96	0.0083	0.0029
Mercury	101614-04-25 09:06 G	38834925.77	38834925.88	38834925.99	0.0083	0.0048
Mercury	101614-07-22 10:18 G	38835013.85	38835013.93	38835014.01	0.0083	0.0066
Earth	101620-04-09 15:50 G	38837101.91	38837102.16	38837102.42	0.0080	0.0019
Moon	101620-04-09 19:11 G	38837102.06	38837102.30	38837102.56	0.0080	0.0022 *
Venus	101621-02-08 03:21 G	38837406.49	38837406.64	38837406.81	0.0080	0.0056

Venus	101621-09-21 14:09 G	38837631.88	38837632.09	38837632.31	0.0079	0.0025
Mercury	101766-03-08 22:33 G	38890395.39	38890395.44	38890395.54	0.0060	0.0055
Mercury	101766-06-04 23:45 G	38890483.39	38890483.49	38890483.64	0.0060	0.0045
Mercury	101766-09-01 01:11 G	38890571.41	38890571.55	38890571.72	0.0060	0.0035
Mercury	101766-11-28 02:38 G	38890659.45	38890659.61	38890659.80	0.0060	0.0025
Mercury	101767-02-24 03:50 G	38890747.49	38890747.66	38890747.86	0.0060	0.0016
Mercury	101767-05-23 05:16 G	38890835.54	38890835.72	38890835.92	0.0060	0.0005
Mercury	101767-08-19 06:42 G	38890923.59	38890923.78	38890923.97	0.0060	0.0005
Mercury	101767-11-15 07:40 G	38891011.65	38891011.82	38891012.02	0.0060	0.0016
Mercury	101768-02-11 08:52 G	38891099.71	38891099.87	38891100.06	0.0060	0.0026
Mercury	101768-05-09 10:18 G	38891187.79	38891187.93	38891188.09	0.0060	0.0036
Mercury	101768-08-05 11:30 G	38891275.87	38891275.98	38891276.12	0.0061	0.0046
Mercury	101768-11-01 12:42 G	38891363.97	38891364.03	38891364.12	0.0061	0.0056
Mars	101772-03-06 06:42 G	38892584.62	38892584.78	38892585.00	0.0062	0.0046
Moon	101778-10-12 14:52 G	38894995.86	38894996.12	38894996.38	0.0064	0.0004
Earth	101778-10-12 17:59 G	38894996.00	38894996.25	38894996.51	0.0064	0.0007 *
Venus	101780-02-20 01:26 G	38895491.45	38895491.56	38895491.72	0.0064	0.0050
Venus	101780-10-02 05:30 G	38895716.52	38895716.73	38895716.95	0.0064	0.0009
Venus	101781-05-15 08:38 G	38895941.69	38895941.86	38895942.07	0.0065	0.0033
Mercury	101860-12-11 09:21 G	38925005.83	38925005.89	38925005.96	0.0084	0.0073
Mercury	101861-03-09 10:33 G	38925093.85	38925093.94	38925094.05	0.0084	0.0054
Mercury	101861-06-05 11:59 G	38925181.88	38925182.00	38925182.12	0.0084	0.0035
Mercury	101861-09-01 13:11 G	38925269.92	38925270.05	38925270.18	0.0084	0.0016
Mercury	101861-11-28 14:23 G	38925357.97	38925358.10	38925358.24	0.0083	0.0003
Mercury	101862-02-24 15:35 G	38925446.02	38925446.15	38925446.28	0.0083	0.0022
Mercury	101862-05-23 16:33 G	38925534.09	38925534.19	38925534.32	0.0083	0.0041
Mercury	101862-08-19 17:45 G	38925622.16	38925622.24	38925622.35	0.0083	0.0060
Mercury	101862-11-15 19:11 G	38925710.26	38925710.30	38925710.35	0.0083	0.0078
Moon	101868-04-12 15:50 G	38927684.93	38927685.16	38927685.43	0.0080	0.0024
Earth	101868-04-12 19:40 G	38927685.08	38927685.32	38927685.58	0.0080	0.0022 *

Venus 101869-08-26 15:35 G 38928185.93 38928186.15 38928186.38 0.0079 0.0004

Venus 101870-04-09 01:54 G 38928411.54 38928411.58 38928411.65 0.0079 0.0076

# 103RD MILLENNIUM CE

**This is a list of transits visible from Pluto in the 103rd millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	102014-04-06 04:04	G	38981003.65	38981003.67	38981003.74	0.0060	0.0058	
Mercury	102014-07-03 05:30	G	38981091.63	38981091.73	38981091.86	0.0060	0.0048	
Mercury	102014-09-29 06:57	G	38981179.65	38981179.79	38981179.95	0.0060	0.0038	
Mercury	102014-12-26 08:23	G	38981267.68	38981267.85	38981268.02	0.0060	0.0028	
Mercury	102015-03-24 09:35	G	38981355.72	38981355.90	38981356.09	0.0060	0.0018	
Mercury	102015-06-20 11:02	G	38981443.77	38981443.96	38981444.15	0.0060	0.0008	
Mercury	102015-09-16 12:14	G	38981531.82	38981532.01	38981532.20	0.0060	0.0002	
Mercury	102015-12-13 13:26	G	38981619.88	38981620.06	38981620.25	0.0060	0.0012	
Mercury	102016-03-10 14:38	G	38981707.94	38981708.11	38981708.30	0.0060	0.0022	
Mercury	102016-06-06 16:04	G	38981796.01	38981796.17	38981796.33	0.0060	0.0032	
Mercury	102016-09-02 17:16	G	38981884.09	38981884.22	38981884.36	0.0060	0.0042	
Mercury	102016-11-29 17:59	G	38981972.18	38981972.25	38981972.37	0.0061	0.0053	
Mars	102020-06-16 01:54	G	38983266.45	38983266.58	38983266.78	0.0062	0.0051	
Earth	102026-10-16 00:14	G	38985579.31	38985579.51	38985579.75	0.0064	0.0033	
Moon	102026-10-16 03:50	G	38985579.46	38985579.66	38985579.89	0.0064	0.0034	*
Moon	102027-10-17 08:23	G	38985945.69	38985945.85	38985946.05	0.0064	0.0044	

Earth	102027-10-17 11:45 G	38985945.80	38985945.99	38985946.19	0.0064	0.0041	*
Venus	102028-01-25 06:14 G	38986045.76	38986045.76	38986045.80	0.0064	0.0064	
Venus	102028-09-06 10:04 G	38986270.73	38986270.92	38986271.13	0.0064	0.0024	
Venus	102029-04-19 13:26 G	38986495.87	38986496.06	38986496.28	0.0064	0.0018	
Venus	102029-11-30 16:47 G	38986721.14	38986721.20	38986721.32	0.0065	0.0059	
Mercury	102109-01-08 16:47 G	39015614.18	39015614.20	39015614.23	0.0084	0.0082	
Mercury	102109-04-06 17:59 G	39015702.17	39015702.25	39015702.34	0.0084	0.0063	
Mercury	102109-07-03 19:11 G	39015790.19	39015790.30	39015790.42	0.0084	0.0044	
Mercury	102109-09-29 20:38 G	39015878.23	39015878.36	39015878.49	0.0084	0.0025	
Mercury	102109-12-26 21:50 G	39015966.27	39015966.41	39015966.54	0.0084	0.0006	
Mercury	102110-03-24 23:02 G	39016054.33	39016054.46	39016054.59	0.0083	0.0013	
Mercury	102110-06-20 23:59 G	39016142.39	39016142.50	39016142.63	0.0083	0.0032	
Mercury	102110-09-17 01:11 G	39016230.45	39016230.55	39016230.67	0.0083	0.0051	
Mercury	102110-12-14 02:38 G	39016318.54	39016318.61	39016318.68	0.0083	0.0069	
Earth	102116-04-15 21:50 G	39018268.29	39018268.41	39018268.58	0.0080	0.0067	
Moon	102116-04-16 01:11 G	39018268.46	39018268.55	39018268.70	0.0080	0.0071	*
Venus	102117-07-31 16:04 G	39018739.98	39018740.17	39018740.38	0.0079	0.0036	
Venus	102118-03-14 02:52 G	39018965.45	39018965.62	39018965.82	0.0079	0.0045	
Mercury	102262-07-31 10:04 G	39071699.87	39071699.92	39071700.03	0.0060	0.0055	
Mercury	102262-10-27 11:30 G	39071787.87	39071787.98	39071788.13	0.0060	0.0045	
Mercury	102263-01-23 12:42 G	39071875.90	39071876.03	39071876.21	0.0060	0.0035	
Mercury	102263-04-21 14:09 G	39071963.93	39071964.09	39071964.28	0.0060	0.0025	
Mercury	102263-07-18 15:35 G	39072051.97	39072052.15	39072052.35	0.0060	0.0015	
Mercury	102263-10-14 17:02 G	39072140.02	39072140.21	39072140.41	0.0060	0.0005	
Mercury	102264-01-10 18:14 G	39072228.08	39072228.26	39072228.46	0.0060	0.0006	
Mercury	102264-04-07 19:26 G	39072316.14	39072316.31	39072316.51	0.0060	0.0015	
Mercury	102264-07-04 20:38 G	39072404.20	39072404.36	39072404.55	0.0060	0.0026	
Mercury	102264-09-30 21:50 G	39072492.27	39072492.41	39072492.58	0.0060	0.0036	
Mercury	102264-12-27 23:02 G	39072580.36	39072580.46	39072580.61	0.0060	0.0046	
Mercury	102265-03-26 00:28 G	39072668.46	39072668.52	39072668.61	0.0061	0.0056	

Mars	102268-09-25 17:30 G	39073948.07	39073948.23	39073948.43	0.0062	0.0048
Earth	102275-10-20 15:50 G	39076528.92	39076529.16	39076529.42	0.0064	0.0010
Moon	102275-10-20 17:59 G	39076529.01	39076529.25	39076529.53	0.0064	0.0013 *
Venus	102276-08-11 13:11 G	39076824.91	39076825.05	39076825.23	0.0064	0.0044
Venus	102277-03-24 17:02 G	39077050.00	39077050.21	39077050.43	0.0064	0.0003
Venus	102277-11-04 20:09 G	39077275.19	39077275.34	39077275.54	0.0065	0.0039
Mercury	102357-05-05 00:14 G	39106310.50	39106310.51	39106310.55	0.0084	0.0082
Mercury	102357-08-01 01:40 G	39106398.49	39106398.57	39106398.66	0.0084	0.0063
Mercury	102357-10-28 02:52 G	39106486.51	39106486.62	39106486.74	0.0084	0.0044
Mercury	102358-01-24 04:04 G	39106574.55	39106574.67	39106574.81	0.0084	0.0025
Mercury	102358-04-22 05:30 G	39106662.59	39106662.73	39106662.86	0.0084	0.0006
Mercury	102358-07-19 06:42 G	39106750.65	39106750.78	39106750.91	0.0083	0.0013
Mercury	102358-10-15 07:40 G	39106838.71	39106838.82	39106838.95	0.0083	0.0033
Mercury	102359-01-11 08:52 G	39106926.77	39106926.87	39106926.99	0.0083	0.0051
Mercury	102359-04-09 10:18 G	39107014.86	39107014.93	39107015.00	0.0083	0.0069
Earth	102365-04-21 00:57 G	39109218.31	39109218.54	39109218.81	0.0080	0.0021
Moon	102365-04-21 02:52 G	39109218.37	39109218.62	39109218.89	0.0080	0.0019 *
Venus	102366-02-16 00:14 G	39109519.28	39109519.51	39109519.74	0.0079	0.0003
Venus	102366-09-29 10:18 G	39109744.90	39109744.93	39109745.00	0.0079	0.0077
Mercury	102510-11-24 16:04 G	39162396.10	39162396.17	39162396.28	0.0060	0.0053
Mercury	102511-02-20 17:30 G	39162484.11	39162484.23	39162484.37	0.0060	0.0043
Mercury	102511-05-19 18:42 G	39162572.13	39162572.28	39162572.45	0.0060	0.0033
Mercury	102511-08-15 20:09 G	39162660.17	39162660.34	39162660.52	0.0060	0.0023
Mercury	102511-11-11 21:35 G	39162748.21	39162748.40	39162748.59	0.0060	0.0013
Mercury	102512-02-07 22:47 G	39162836.26	39162836.45	39162836.65	0.0060	0.0004
Mercury	102512-05-06 00:13 G	39162924.32	39162924.51	39162924.70	0.0060	0.0007
Mercury	102512-08-02 01:25 G	39163012.38	39163012.56	39163012.75	0.0060	0.0017
Mercury	102512-10-29 02:37 G	39163100.44	39163100.61	39163100.79	0.0060	0.0027
Mercury	102513-01-25 04:04 G	39163188.52	39163188.67	39163188.82	0.0060	0.0037
Mercury	102513-04-23 05:16 G	39163276.61	39163276.72	39163276.84	0.0060	0.0047

Mercury	102513-07-20 05:59 G	39163364.72	39163364.75	39163364.84	0.0061	0.0058
Mars	102517-01-05 05:59 G	39164629.56	39164629.75	39164630.00	0.0062	0.0041
Moon	102523-10-23 18:42 G	39167112.06	39167112.28	39167112.51	0.0064	0.0027
Earth	102523-10-23 19:11 G	39167112.07	39167112.30	39167112.55	0.0064	0.0025 *
Moon	102524-10-24 04:04 G	39167478.55	39167478.67	39167478.86	0.0064	0.0052
Earth	102524-10-24 06:13 G	39167478.61	39167478.76	39167478.94	0.0064	0.0049 *
Venus	102525-02-26 19:40 G	39167604.13	39167604.32	39167604.53	0.0064	0.0025
Venus	102525-10-09 23:30 G	39167829.27	39167829.48	39167829.69	0.0064	0.0016
Venus	102526-05-23 02:52 G	39168054.53	39168054.62	39168054.73	0.0065	0.0057
Mercury	102605-08-29 07:54 G	39197006.81	39197006.83	39197006.88	0.0084	0.0081
Mercury	102605-11-25 09:21 G	39197094.81	39197094.89	39197094.99	0.0084	0.0062
Mercury	102606-02-21 10:33 G	39197182.83	39197182.94	39197183.07	0.0084	0.0043
Mercury	102606-05-20 11:59 G	39197270.87	39197271.00	39197271.13	0.0084	0.0023
Mercury	102606-08-16 13:11 G	39197358.92	39197359.05	39197359.19	0.0084	0.0004
Mercury	102606-11-12 14:23 G	39197446.97	39197447.10	39197447.23	0.0083	0.0014
Mercury	102607-02-08 15:21 G	39197535.03	39197535.14	39197535.27	0.0083	0.0034
Mercury	102607-05-07 16:33 G	39197623.10	39197623.19	39197623.31	0.0083	0.0052
Mercury	102607-08-03 17:59 G	39197711.18	39197711.25	39197711.32	0.0083	0.0070
Earth	102613-04-23 22:18 G	39199801.21	39199801.43	39199801.66	0.0080	0.0041
Moon	102613-04-23 22:47 G	39199801.26	39199801.45	39199801.68	0.0080	0.0045 *
Venus	102614-01-20 21:06 G	39200073.22	39200073.38	39200073.57	0.0080	0.0050
Venus	102614-09-03 07:54 G	39200298.64	39200298.83	39200299.05	0.0079	0.0032
Mercury	102759-03-20 21:06 G	39253092.33	39253092.38	39253092.49	0.0060	0.0054
Mercury	102759-06-16 22:33 G	39253180.33	39253180.44	39253180.59	0.0060	0.0044
Mercury	102759-09-12 23:59 G	39253268.36	39253268.50	39253268.67	0.0060	0.0034
Mercury	102759-12-10 01:25 G	39253356.39	39253356.56	39253356.74	0.0060	0.0024
Mercury	102760-03-07 02:52 G	39253444.43	39253444.62	39253444.81	0.0060	0.0014
Mercury	102760-06-03 04:04 G	39253532.48	39253532.67	39253532.87	0.0060	0.0005
Mercury	102760-08-30 05:16 G	39253620.54	39253620.72	39253620.92	0.0060	0.0006
Mercury	102760-11-26 06:28 G	39253708.60	39253708.77	39253708.97	0.0060	0.0016



Mercury	102761-02-22 07:40 G	39253796.66	39253796.82	39253797.01	0.0060	0.0026
Mercury	102761-05-21 09:21 G	39253884.74	39253884.89	39253885.04	0.0060	0.0036
Mercury	102761-08-17 10:04 G	39253972.82	39253972.92	39253973.07	0.0060	0.0047
Mercury	102761-11-13 11:16 G	39254060.93	39254060.97	39254061.07	0.0060	0.0057
Mars	102765-04-16 16:18 G	39255310.95	39255311.18	39255311.47	0.0061	0.0027
Earth	102772-10-27 07:25 G	39258061.57	39258061.81	39258062.08	0.0064	0.0010
Moon	102772-10-27 10:04 G	39258061.69	39258061.92	39258062.18	0.0064	0.0012 *
Venus	102773-01-31 21:06 G	39258158.27	39258158.38	39258158.52	0.0064	0.0051
Venus	102773-09-14 00:42 G	39258383.33	39258383.53	39258383.76	0.0064	0.0012
Venus	102774-04-27 04:18 G	39258608.50	39258608.68	39258608.88	0.0064	0.0030
Mercury	102854-03-20 16:18 G	39287791.11	39287791.18	39287791.26	0.0084	0.0069
Mercury	102854-06-16 17:30 G	39287879.13	39287879.23	39287879.34	0.0084	0.0050
Mercury	102854-09-12 18:42 G	39287967.16	39287967.28	39287967.41	0.0084	0.0031
Mercury	102854-12-09 20:09 G	39288055.21	39288055.34	39288055.47	0.0084	0.0012
Mercury	102855-03-07 21:21 G	39288143.25	39288143.39	39288143.52	0.0083	0.0007
Mercury	102855-06-03 22:33 G	39288231.31	39288231.44	39288231.57	0.0083	0.0026
Mercury	102855-08-30 23:30 G	39288319.37	39288319.48	39288319.60	0.0083	0.0045
Mercury	102855-11-27 00:42 G	39288407.45	39288407.53	39288407.62	0.0083	0.0063
Mercury	102856-02-23 02:09 G	39288495.57	39288495.59	39288495.61	0.0083	0.0081
Earth	102862-04-27 20:09 G	39290751.12	39290751.34	39290751.60	0.0080	0.0031
Moon	102862-04-27 23:45 G	39290751.27	39290751.49	39290751.75	0.0080	0.0028 *
Venus	102862-08-07 01:54 G	39290852.39	39290852.58	39290852.81	0.0080	0.0031
Venus	102863-03-20 12:57 G	39291077.88	39291078.04	39291078.22	0.0079	0.0051

# 104TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 104th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	103007-07-15 02:37	G	39343788.55	39343788.61	39343788.69	0.0060	0.0055	
Mercury	103007-10-11 04:04	G	39343876.55	39343876.67	39343876.80	0.0060	0.0045	
Mercury	103008-01-07 05:30	G	39343964.57	39343964.73	39343964.88	0.0060	0.0035	
Mercury	103008-04-04 06:13	G	39344052.61	39344052.76	39344052.96	0.0060	0.0026	
Mercury	103008-07-01 07:40	G	39344140.65	39344140.82	39344141.02	0.0060	0.0016	
Mercury	103008-09-27 09:06	G	39344228.70	39344228.88	39344229.08	0.0060	0.0006	
Mercury	103008-12-24 10:33	G	39344316.75	39344316.94	39344317.14	0.0060	0.0004	
Mercury	103009-03-22 11:45	G	39344404.81	39344404.99	39344405.19	0.0060	0.0015	
Mercury	103009-06-18 12:57	G	39344492.88	39344493.04	39344493.23	0.0060	0.0025	
Mercury	103009-09-14 14:09	G	39344580.95	39344581.09	39344581.26	0.0060	0.0035	
Mercury	103009-12-11 15:35	G	39344669.03	39344669.15	39344669.29	0.0060	0.0045	
Mercury	103010-03-09 16:47	G	39344757.14	39344757.20	39344757.30	0.0060	0.0055	
Mars	103013-07-27 03:06	G	39345992.36	39345992.63	39345992.93	0.0061	0.0011	
Moon	103020-10-30 05:01	G	39348644.52	39348644.71	39348644.95	0.0064	0.0034	
Earth	103020-10-30 09:06	G	39348644.66	39348644.88	39348645.11	0.0064	0.0030	*
Venus	103021-08-19 02:23	G	39348937.44	39348937.60	39348937.79	0.0064	0.0037	
Earth	103021-10-31 19:54	G	39349011.16	39349011.33	39349011.53	0.0064	0.0044	
Moon	103021-10-31 22:47	G	39349011.30	39349011.45	39349011.65	0.0064	0.0047	*
Venus	103022-04-01 06:13	G	39349162.55	39349162.76	39349162.98	0.0064	0.0003	
Venus	103022-11-12 09:35	G	39349387.75	39349387.90	39349388.07	0.0064	0.0044	
Mercury	103102-07-15 23:16	G	39378487.42	39378487.47	39378487.55	0.0084	0.0073	
Mercury	103102-10-12 00:42	G	39378575.44	39378575.53	39378575.64	0.0084	0.0054	
Mercury	103103-01-08 01:54	G	39378663.47	39378663.58	39378663.71	0.0084	0.0035	
Mercury	103103-04-06 03:21	G	39378751.51	39378751.64	39378751.77	0.0084	0.0016	
Mercury	103103-07-03 04:33	G	39378839.56	39378839.69	39378839.82	0.0084	0.0003	
Mercury	103103-09-29 05:45	G	39378927.61	39378927.74	39378927.87	0.0083	0.0022	

Mercury	103103-12-26 06:57 G	39379015.67	39379015.79	39379015.91	0.0083	0.0041
Mercury	103104-03-23 07:54 G	39379103.75	39379103.83	39379103.93	0.0083	0.0059
Mercury	103104-06-19 08:52 G	39379191.84	39379191.87	39379191.93	0.0083	0.0078
Earth	103110-05-01 14:09 G	39381333.88	39381334.09	39381334.33	0.0080	0.0041
Moon	103110-05-01 14:09 G	39381333.89	39381334.09	39381334.33	0.0080	0.0039 *
Venus	103111-02-23 08:23 G	39381631.63	39381631.85	39381632.08	0.0079	0.0005
Venus	103111-10-06 18:42 G	39381857.24	39381857.28	39381857.36	0.0079	0.0076
Mercury	103255-11-07 06:57 G	39434484.78	39434484.79	39434484.86	0.0060	0.0059
Mercury	103256-02-03 08:23 G	39434572.76	39434572.85	39434572.98	0.0060	0.0049
Mercury	103256-05-01 09:49 G	39434660.78	39434660.91	39434661.07	0.0060	0.0039
Mercury	103256-07-28 11:16 G	39434748.81	39434748.97	39434749.15	0.0060	0.0029
Mercury	103256-10-24 12:42 G	39434836.85	39434837.03	39434837.22	0.0060	0.0019
Mercury	103257-01-20 14:09 G	39434924.90	39434925.09	39434925.28	0.0060	0.0009
Mercury	103257-04-18 15:21 G	39435012.95	39435013.14	39435013.33	0.0060	0.0001
Mercury	103257-07-15 16:33 G	39435101.01	39435101.19	39435101.39	0.0060	0.0011
Mercury	103257-10-11 17:59 G	39435189.07	39435189.25	39435189.43	0.0060	0.0021
Mercury	103258-01-07 19:11 G	39435277.14	39435277.30	39435277.47	0.0060	0.0031
Mercury	103258-04-05 20:23 G	39435365.22	39435365.35	39435365.50	0.0060	0.0041
Mercury	103258-07-02 21:49 G	39435453.31	39435453.41	39435453.51	0.0060	0.0051
Mars	103261-11-04 11:01 G	39436673.69	39436673.96	39436674.26	0.0061	0.0011
Moon	103269-11-02 15:49 G	39439593.90	39439594.16	39439594.41	0.0064	0.0003
Earth	103269-11-02 19:25 G	39439594.05	39439594.31	39439594.57	0.0064	0.0001 *
Venus	103270-03-05 05:59 G	39439716.58	39439716.75	39439716.97	0.0064	0.0028
Venus	103270-10-16 10:04 G	39439941.71	39439941.92	39439942.13	0.0064	0.0013
Venus	103271-05-29 13:11 G	39440166.95	39440167.05	39440167.18	0.0064	0.0054
Mercury	103351-02-04 06:57 G	39469271.72	39469271.79	39469271.89	0.0084	0.0066
Mercury	103351-05-03 08:23 G	39469359.74	39469359.85	39469359.97	0.0084	0.0047
Mercury	103351-07-30 09:35 G	39469447.78	39469447.90	39469448.03	0.0084	0.0028
Mercury	103351-10-26 10:47 G	39469535.82	39469535.95	39469536.09	0.0084	0.0009
Mercury	103352-01-22 11:59 G	39469623.87	39469624.00	39469624.14	0.0083	0.0011

Mercury	103352-04-19 13:25 G	39469711.93	39469712.06	39469712.18	0.0083	0.0029
Mercury	103352-07-16 14:23 G	39469800.00	39469800.10	39469800.22	0.0083	0.0047
Mercury	103352-10-12 15:21 G	39469888.08	39469888.14	39469888.24	0.0083	0.0066
Venus	103359-01-27 00:13 G	39472185.45	39472185.51	39472185.62	0.0080	0.0074
Earth	103359-05-05 09:49 G	39472283.66	39472283.91	39472284.17	0.0080	0.0022
Moon	103359-05-05 13:11 G	39472283.80	39472284.05	39472284.30	0.0080	0.0019 *
Venus	103359-09-09 11:30 G	39472410.77	39472410.98	39472411.22	0.0079	0.0009
Mercury	103504-05-30 13:11 G	39525268.98	39525269.05	39525269.16	0.0060	0.0052
Mercury	103504-08-26 14:37 G	39525356.99	39525357.11	39525357.26	0.0060	0.0042
Mercury	103504-11-22 16:18 G	39525445.01	39525445.18	39525445.34	0.0060	0.0032
Mercury	103505-02-18 17:01 G	39525533.05	39525533.21	39525533.41	0.0060	0.0023
Mercury	103505-05-17 18:28 G	39525621.10	39525621.27	39525621.47	0.0060	0.0013
Mercury	103505-08-13 20:09 G	39525709.15	39525709.34	39525709.53	0.0060	0.0003
Mercury	103505-11-09 21:21 G	39525797.20	39525797.39	39525797.58	0.0060	0.0007
Mercury	103506-02-05 22:33 G	39525885.26	39525885.44	39525885.63	0.0060	0.0017
Mercury	103506-05-04 23:45 G	39525973.33	39525973.49	39525973.67	0.0060	0.0028
Mercury	103506-08-01 00:57 G	39526061.41	39526061.54	39526061.71	0.0060	0.0038
Mercury	103506-10-28 02:09 G	39526149.49	39526149.59	39526149.73	0.0060	0.0048
Mercury	103507-01-24 03:35 G	39526237.61	39526237.65	39526237.72	0.0060	0.0058
Mars	103510-02-14 20:09 G	39527355.11	39527355.34	39527355.62	0.0061	0.0031
Earth	103517-11-06 18:42 G	39530177.13	39530177.28	39530177.50	0.0064	0.0044
Moon	103517-11-06 21:49 G	39530177.25	39530177.41	39530177.62	0.0064	0.0044 *
Venus	103518-02-08 06:42 G	39530270.71	39530270.78	39530270.91	0.0064	0.0057
Venus	103518-09-21 11:01 G	39530495.75	39530495.96	39530496.17	0.0064	0.0017
Moon	103518-11-08 04:47 G	39530543.50	39530543.70	39530543.93	0.0064	0.0032
Earth	103518-11-08 06:28 G	39530543.56	39530543.77	39530544.01	0.0064	0.0031 *
Venus	103519-05-04 14:09 G	39530720.90	39530721.09	39530721.30	0.0064	0.0024
Mercury	103599-05-31 14:09 G	39559968.03	39559968.09	39559968.16	0.0084	0.0072
Mercury	103599-08-27 15:21 G	39560056.04	39560056.14	39560056.25	0.0084	0.0053
Mercury	103599-11-23 16:33 G	39560144.07	39560144.19	39560144.32	0.0084	0.0034

Mercury	103600-02-19 17:45 G	39560232.11	39560232.24	39560232.38	0.0084	0.0016
Mercury	103600-05-17 18:57 G	39560320.16	39560320.29	39560320.43	0.0084	0.0004
Mercury	103600-08-13 20:09 G	39560408.22	39560408.34	39560408.48	0.0083	0.0022
Mercury	103600-11-09 21:21 G	39560496.28	39560496.39	39560496.51	0.0083	0.0041
Mercury	103601-02-05 22:33 G	39560584.35	39560584.44	39560584.54	0.0083	0.0059
Mercury	103601-05-04 23:45 G	39560672.45	39560672.49	39560672.54	0.0083	0.0077
Mars	103603-03-02 02:52 G	39561338.54	39561338.62	39561338.74	0.0082	0.0079
Moon	103607-05-07 22:18 G	39562866.24	39562866.43	39562866.64	0.0080	0.0052
Earth	103607-05-08 01:40 G	39562866.40	39562866.57	39562866.78	0.0080	0.0055 *
Venus	103607-08-14 05:16 G	39562964.57	39562964.72	39562964.91	0.0080	0.0053
Venus	103608-03-26 16:47 G	39563189.99	39563190.20	39563190.41	0.0079	0.0029
Mercury	103752-09-22 17:16 G	39615965.20	39615965.22	39615965.30	0.0060	0.0058
Mercury	103752-12-19 18:42 G	39616053.19	39616053.28	39616053.42	0.0060	0.0048
Mercury	103753-03-17 20:09 G	39616141.21	39616141.34	39616141.50	0.0060	0.0038
Mercury	103753-06-13 21:35 G	39616229.24	39616229.40	39616229.58	0.0060	0.0028
Mercury	103753-09-09 23:01 G	39616317.28	39616317.46	39616317.65	0.0060	0.0018
Mercury	103753-12-07 00:28 G	39616405.33	39616405.52	39616405.71	0.0060	0.0008
Mercury	103754-03-05 01:40 G	39616493.38	39616493.57	39616493.76	0.0060	0.0002
Mercury	103754-06-01 03:06 G	39616581.44	39616581.63	39616581.82	0.0060	0.0012
Mercury	103754-08-28 04:18 G	39616669.50	39616669.68	39616669.86	0.0060	0.0021
Mercury	103754-11-24 05:30 G	39616757.57	39616757.73	39616757.90	0.0060	0.0031
Mercury	103755-02-20 06:42 G	39616845.65	39616845.78	39616845.93	0.0060	0.0042
Mercury	103755-05-19 07:54 G	39616933.75	39616933.83	39616933.94	0.0060	0.0052
Mars	103758-05-26 02:23 G	39618036.53	39618036.60	39618036.74	0.0061	0.0057
Venus	103766-08-25 10:18 G	39621049.81	39621049.93	39621050.07	0.0064	0.0050
Moon	103766-11-10 04:04 G	39621126.42	39621126.67	39621126.94	0.0064	0.0015
Earth	103766-11-10 04:04 G	39621126.44	39621126.67	39621126.93	0.0064	0.0018 *
Venus	103767-04-07 13:54 G	39621274.87	39621275.08	39621275.30	0.0064	0.0010
Earth	103767-11-11 15:21 G	39621493.05	39621493.14	39621493.27	0.0064	0.0058
Moon	103767-11-11 16:47 G	39621493.10	39621493.20	39621493.36	0.0064	0.0055 *

Venus	103767-11-18 17:01 G	39621500.04	39621500.21	39621500.42	0.0064	0.0031
Mercury	103847-12-21 21:06 G	39650752.32	39650752.38	39650752.47	0.0084	0.0069
Mercury	103848-03-18 22:33 G	39650840.34	39650840.44	39650840.55	0.0084	0.0050
Mercury	103848-06-14 23:45 G	39650928.37	39650928.49	39650928.62	0.0084	0.0031
Mercury	103848-09-11 00:57 G	39651016.41	39651016.54	39651016.68	0.0084	0.0012
Mercury	103848-12-08 02:09 G	39651104.46	39651104.59	39651104.73	0.0084	0.0008
Mercury	103849-03-06 03:21 G	39651192.52	39651192.64	39651192.77	0.0083	0.0026
Mercury	103849-06-02 04:33 G	39651280.58	39651280.69	39651280.81	0.0083	0.0044
Mercury	103849-08-29 05:45 G	39651368.66	39651368.74	39651368.83	0.0083	0.0063
Mercury	103849-11-25 06:42 G	39651456.77	39651456.78	39651456.82	0.0083	0.0081
Mars	103851-06-09 17:01 G	39652017.88	39652018.21	39652018.57	0.0082	0.0008
Venus	103856-02-29 07:25 G	39653743.64	39653743.81	39653744.01	0.0080	0.0046
Moon	103856-05-11 17:01 G	39653815.96	39653816.21	39653816.47	0.0080	0.0001
Earth	103856-05-11 19:11 G	39653816.04	39653816.30	39653816.57	0.0080	0.0003 *
Venus	103856-10-11 18:42 G	39653969.08	39653969.28	39653969.48	0.0079	0.0036

# 105TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 105th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	104001-04-14 23:01 G	39706749.39	39706749.46	39706749.57	0.0060	0.0053		
Mercury	104001-07-12 00:28 G	39706837.40	39706837.52	39706837.67	0.0060	0.0043		
Mercury	104001-10-08 01:54 G	39706925.43	39706925.58	39706925.75	0.0060	0.0033		

Mercury	104002-01-04 03:21 G	39707013.47	39707013.64	39707013.82	0.0060	0.0023
Mercury	104002-04-02 04:47 G	39707101.51	39707101.70	39707101.89	0.0060	0.0013
Mercury	104002-06-29 05:59 G	39707189.56	39707189.75	39707189.95	0.0060	0.0004
Mercury	104002-09-25 07:25 G	39707277.62	39707277.81	39707278.00	0.0060	0.0006
Mercury	104002-12-22 08:37 G	39707365.68	39707365.86	39707366.05	0.0060	0.0016
Mercury	104003-03-20 09:49 G	39707453.74	39707453.91	39707454.09	0.0060	0.0026
Mercury	104003-06-16 11:01 G	39707541.82	39707541.96	39707542.13	0.0060	0.0037
Mercury	104003-09-12 12:13 G	39707629.91	39707630.01	39707630.15	0.0060	0.0047
Mercury	104003-12-09 13:25 G	39707718.02	39707718.06	39707718.15	0.0060	0.0057
Earth	104014-11-13 02:37 G	39711709.61	39711709.61	39711709.66	0.0064	0.0064
Venus	104015-03-12 13:40 G	39711828.92	39711829.07	39711829.25	0.0064	0.0042
Venus	104015-10-23 17:30 G	39712054.01	39712054.23	39712054.45	0.0064	0.0002
Moon	104015-11-14 11:30 G	39712075.73	39712075.98	39712076.24	0.0064	0.0012
Earth	104015-11-14 14:23 G	39712075.86	39712076.10	39712076.36	0.0064	0.0011 *
Venus	104016-06-04 20:23 G	39712279.20	39712279.35	39712279.55	0.0064	0.0040
Saturn	104017-08-17 08:37 G	39712717.18	39712717.86	39712718.58	0.0065	0.0007
Mercury	104096-04-15 04:04 G	39741448.63	39741448.67	39741448.72	0.0084	0.0078
Mercury	104096-07-12 05:01 G	39741536.63	39741536.71	39741536.81	0.0084	0.0060
Mercury	104096-10-08 06:13 G	39741624.66	39741624.76	39741624.89	0.0084	0.0041
Mercury	104097-01-04 07:40 G	39741712.69	39741712.82	39741712.95	0.0084	0.0022
Mercury	104097-04-02 08:52 G	39741800.74	39741800.87	39741801.01	0.0084	0.0003
Mercury	104097-06-29 10:04 G	39741888.79	39741888.92	39741889.05	0.0083	0.0016
Mercury	104097-09-25 11:16 G	39741976.85	39741976.97	39741977.09	0.0083	0.0034
Mercury	104097-12-22 12:28 G	39742064.92	39742065.02	39742065.13	0.0083	0.0053
Mercury	104098-03-20 13:25 G	39742153.00	39742153.06	39742153.14	0.0083	0.0071
Mars	104099-09-16 13:40 G	39742697.95	39742698.07	39742698.27	0.0082	0.0074
Moon	104104-05-14 10:47 G	39744398.91	39744398.95	39744399.00	0.0080	0.0078
Venus	104104-09-15 11:30 G	39744522.78	39744522.98	39744523.20	0.0080	0.0030
Venus	104105-04-28 22:04 G	39744748.27	39744748.42	39744748.61	0.0079	0.0052
Earth	104105-05-16 15:21 G	39744766.01	39744766.14	39744766.28	0.0079	0.0068

Moon	104105-05-16 15:49 G	39744766.02	39744766.16	39744766.31	0.0079	0.0065 *
Jupiter	104106-03-02 13:54 G	39745055.92	39745056.08	39745056.40	0.0079	0.0072
Mercury	104249-11-05 04:04 G	39797533.59	39797533.67	39797533.80	0.0060	0.0051
Mercury	104250-02-01 05:30 G	39797621.61	39797621.73	39797621.89	0.0060	0.0041
Mercury	104250-04-30 06:57 G	39797709.64	39797709.79	39797709.97	0.0060	0.0031
Mercury	104250-07-27 08:23 G	39797797.68	39797797.85	39797798.04	0.0060	0.0021
Mercury	104250-10-23 09:49 G	39797885.72	39797885.91	39797886.10	0.0060	0.0011
Mercury	104251-01-19 11:01 G	39797973.77	39797973.96	39797974.16	0.0060	0.0002
Mercury	104251-04-17 12:28 G	39798061.83	39798062.02	39798062.21	0.0060	0.0009
Mercury	104251-07-14 13:40 G	39798149.89	39798150.07	39798150.26	0.0060	0.0018
Mercury	104251-10-10 14:52 G	39798237.96	39798238.12	39798238.30	0.0060	0.0029
Mercury	104252-01-06 16:04 G	39798326.04	39798326.17	39798326.33	0.0060	0.0039
Mercury	104252-04-03 17:16 G	39798414.13	39798414.22	39798414.35	0.0060	0.0049
Mercury	104252-06-30 18:42 G	39798502.25	39798502.28	39798502.34	0.0060	0.0059
Venus	104263-09-27 15:49 G	39802608.01	39802608.16	39802608.35	0.0064	0.0039
Earth	104263-11-17 10:04 G	39802658.75	39802658.92	39802659.14	0.0064	0.0042
Moon	104263-11-17 13:25 G	39802658.89	39802659.06	39802659.29	0.0064	0.0039 *
Venus	104264-05-09 19:40 G	39802833.10	39802833.32	39802833.54	0.0064	0.0001
Moon	104264-11-17 18:28 G	39803025.07	39803025.27	39803025.51	0.0064	0.0031
Earth	104264-11-17 21:49 G	39803025.21	39803025.41	39803025.64	0.0064	0.0033 *
Venus	104264-12-20 22:33 G	39803058.30	39803058.44	39803058.63	0.0064	0.0042
Mercury	104344-11-06 10:33 G	39832232.91	39832232.94	39832233.00	0.0084	0.0079
Mercury	104345-02-02 11:59 G	39832320.91	39832321.00	39832321.10	0.0084	0.0060
Mercury	104345-05-01 13:11 G	39832408.94	39832409.05	39832409.17	0.0084	0.0041
Mercury	104345-07-28 14:37 G	39832496.98	39832497.11	39832497.24	0.0084	0.0022
Mercury	104345-10-24 15:49 G	39832585.02	39832585.16	39832585.29	0.0084	0.0004
Mercury	104346-01-20 16:47 G	39832673.08	39832673.20	39832673.34	0.0084	0.0016
Mercury	104346-04-18 17:59 G	39832761.14	39832761.25	39832761.38	0.0083	0.0034
Mercury	104346-07-15 19:11 G	39832849.20	39832849.30	39832849.41	0.0083	0.0053
Mercury	104346-10-11 20:09 G	39832937.29	39832937.34	39832937.42	0.0083	0.0071



Venus	104353-04-02 11:59 G	39835301.80	39835302.00	39835302.22	0.0080	0.0029
Moon	104353-05-18 21:35 G	39835348.17	39835348.40	39835348.66	0.0080	0.0033
Earth	104353-05-19 00:13 G	39835348.29	39835348.51	39835348.77	0.0080	0.0031 *
Venus	104353-11-13 22:47 G	39835527.30	39835527.45	39835527.63	0.0079	0.0053
Mercury	104498-02-28 08:23 G	39888229.81	39888229.85	39888229.92	0.0060	0.0057
Mercury	104498-05-27 09:49 G	39888317.80	39888317.91	39888318.04	0.0060	0.0047
Mercury	104498-08-23 10:47 G	39888405.82	39888405.95	39888406.13	0.0060	0.0038
Mercury	104498-11-19 12:13 G	39888493.86	39888494.01	39888494.20	0.0060	0.0028
Mercury	104499-02-15 13:40 G	39888581.90	39888582.07	39888582.27	0.0060	0.0018
Mercury	104499-05-14 15:06 G	39888669.94	39888670.13	39888670.33	0.0060	0.0008
Mercury	104499-08-10 16:33 G	39888758.00	39888758.19	39888758.38	0.0060	0.0002
Mercury	104499-11-06 17:45 G	39888846.05	39888846.24	39888846.43	0.0060	0.0012
Mercury	104500-02-02 18:42 G	39888934.12	39888934.28	39888934.48	0.0060	0.0023
Mercury	104500-05-01 19:54 G	39889022.19	39889022.33	39889022.52	0.0060	0.0033
Mercury	104500-07-28 21:49 G	39889110.27	39889110.41	39889110.55	0.0060	0.0042
Mercury	104500-10-24 23:01 G	39889198.37	39889198.46	39889198.56	0.0060	0.0052
Mars	104505-02-12 23:01 G	39890770.27	39890770.46	39890770.70	0.0062	0.0042
Venus	104512-04-13 18:42 G	39893387.11	39893387.28	39893387.48	0.0064	0.0033
Earth	104512-11-20 19:11 G	39893608.06	39893608.30	39893608.56	0.0064	0.0016
Moon	104512-11-20 21:35 G	39893608.15	39893608.40	39893608.66	0.0064	0.0014 *
Venus	104512-11-24 22:33 G	39893612.22	39893612.44	39893612.65	0.0064	0.0007
Venus	104513-07-08 01:54 G	39893837.44	39893837.58	39893837.73	0.0064	0.0048
Moon	104513-11-22 05:59 G	39893974.67	39893974.75	39893974.90	0.0064	0.0058
Earth	104513-11-22 06:28 G	39893974.70	39893974.77	39893974.89	0.0064	0.0060 *
Mercury	104593-05-28 18:28 G	39923017.20	39923017.27	39923017.33	0.0084	0.0074
Mercury	104593-08-24 19:25 G	39923105.22	39923105.31	39923105.42	0.0084	0.0055
Mercury	104593-11-20 20:37 G	39923193.25	39923193.36	39923193.49	0.0084	0.0036
Mercury	104594-02-16 22:04 G	39923281.29	39923281.42	39923281.55	0.0084	0.0017
Mercury	104594-05-15 23:16 G	39923369.33	39923369.47	39923369.60	0.0084	0.0002
Mercury	104594-08-12 00:13 G	39923457.39	39923457.51	39923457.65	0.0084	0.0021

Mercury	104594-11-08 01:40 G	39923545.45	39923545.57	39923545.68	0.0083	0.0039
Mercury	104595-02-04 02:37 G	39923633.52	39923633.61	39923633.71	0.0083	0.0057
Mercury	104595-05-03 03:49 G	39923721.61	39923721.66	39923721.72	0.0083	0.0076
Venus	104601-10-18 14:23 G	39926080.89	39926081.10	39926081.33	0.0080	0.0020
Moon	104602-05-23 14:37 G	39926297.87	39926298.11	39926298.37	0.0079	0.0025
Earth	104602-05-23 18:13 G	39926298.03	39926298.26	39926298.52	0.0079	0.0029 *
Venus	104602-06-01 01:11 G	39926306.42	39926306.55	39926306.71	0.0079	0.0062
Mercury	104746-09-21 13:11 G	39979014.00	39979014.05	39979014.13	0.0060	0.0056
Mercury	104746-12-18 14:37 G	39979102.00	39979102.11	39979102.24	0.0060	0.0046
Mercury	104747-03-16 15:35 G	39979190.02	39979190.15	39979190.33	0.0060	0.0037
Mercury	104747-06-12 17:01 G	39979278.05	39979278.21	39979278.40	0.0060	0.0027
Mercury	104747-09-08 18:28 G	39979366.10	39979366.27	39979366.47	0.0060	0.0017
Mercury	104747-12-05 19:54 G	39979454.14	39979454.33	39979454.53	0.0060	0.0007
Mercury	104748-03-02 21:21 G	39979542.20	39979542.39	39979542.58	0.0060	0.0003
Mercury	104748-05-29 22:33 G	39979630.26	39979630.44	39979630.63	0.0060	0.0013
Mercury	104748-08-25 23:30 G	39979718.32	39979718.48	39979718.68	0.0060	0.0023
Mercury	104748-11-22 00:42 G	39979806.39	39979806.53	39979806.72	0.0060	0.0033
Mercury	104749-02-18 02:23 G	39979894.47	39979894.60	39979894.74	0.0060	0.0043
Mercury	104749-05-17 03:35 G	39979982.57	39979982.65	39979982.76	0.0060	0.0053
Mars	104753-05-25 00:28 G	39981451.24	39981451.52	39981451.82	0.0061	0.0006
Venus	104760-10-29 20:52 G	39984166.18	39984166.37	39984166.56	0.0064	0.0031
Venus	104761-06-11 23:59 G	39984391.29	39984391.50	39984391.72	0.0064	0.0009
Moon	104761-11-25 01:25 G	39984557.29	39984557.56	39984557.82	0.0064	0.0002
Earth	104761-11-25 02:23 G	39984557.35	39984557.60	39984557.86	0.0064	0.0004 *
Venus	104762-01-23 03:06 G	39984616.51	39984616.63	39984616.79	0.0064	0.0049
Mercury	104841-12-19 00:57 G	40013801.49	40013801.54	40013801.59	0.0084	0.0076
Mercury	104842-03-17 02:09 G	40013889.49	40013889.59	40013889.69	0.0084	0.0058
Mercury	104842-06-13 03:06 G	40013977.52	40013977.63	40013977.76	0.0084	0.0039
Mercury	104842-09-09 04:33 G	40014065.56	40014065.69	40014065.82	0.0084	0.0020
Mercury	104842-12-06 05:45 G	40014153.61	40014153.74	40014153.88	0.0084	0.0002

Mercury	104843-03-04 06:57 G	40014241.66	40014241.79	40014241.92	0.0084	0.0017
Mercury	104843-05-31 08:09 G	40014329.72	40014329.84	40014329.96	0.0083	0.0036
Mercury	104843-08-27 09:06 G	40014417.79	40014417.88	40014417.99	0.0083	0.0055
Mercury	104843-11-23 10:33 G	40014505.88	40014505.94	40014506.00	0.0083	0.0073
Venus	104850-05-04 13:54 G	40016859.87	40016860.08	40016860.31	0.0080	0.0023
Earth	104850-05-25 01:40 G	40016880.50	40016880.57	40016880.67	0.0080	0.0075
Moon	104850-05-25 04:33 G	40016880.63	40016880.69	40016880.76	0.0080	0.0077 *
Venus	104850-12-16 00:57 G	40017085.39	40017085.54	40017085.69	0.0079	0.0059
Moon	104851-05-27 05:16 G	40017247.67	40017247.72	40017247.82	0.0079	0.0075
Earth	104851-05-27 06:57 G	40017247.72	40017247.79	40017247.92	0.0079	0.0074 *
Mercury	104995-04-12 18:42 G	40069798.20	40069798.28	40069798.39	0.0060	0.0052
Mercury	104995-07-09 20:23 G	40069886.21	40069886.35	40069886.49	0.0060	0.0042
Mercury	104995-10-05 21:06 G	40069974.24	40069974.38	40069974.57	0.0060	0.0033
Mercury	104996-01-01 22:47 G	40070062.28	40070062.45	40070062.64	0.0060	0.0023
Mercury	104996-03-30 00:13 G	40070150.32	40070150.51	40070150.70	0.0060	0.0013
Mercury	104996-06-26 01:25 G	40070238.37	40070238.56	40070238.76	0.0060	0.0004
Mercury	104996-09-22 02:37 G	40070326.43	40070326.61	40070326.81	0.0060	0.0007
Mercury	104996-12-19 03:49 G	40070414.49	40070414.66	40070414.86	0.0060	0.0017
Mercury	104997-03-17 05:30 G	40070502.56	40070502.73	40070502.90	0.0060	0.0026
Mercury	104997-06-13 06:28 G	40070590.63	40070590.77	40070590.94	0.0060	0.0037
Mercury	104997-09-09 07:40 G	40070678.72	40070678.82	40070678.96	0.0060	0.0047
Mercury	104997-12-06 09:06 G	40070766.83	40070766.88	40070766.96	0.0060	0.0056

# 106TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 106th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mars	105001-09-03 05:01	G	40072132.46	40072132.71	40072132.99	0.0061	0.0025	
Venus	105009-05-16 23:30	G	40074945.29	40074945.48	40074945.69	0.0064	0.0025	
Earth	105009-11-27 23:30	G	40075140.31	40075140.48	40075140.68	0.0064	0.0044	
Moon	105009-11-28 01:54	G	40075140.42	40075140.58	40075140.80	0.0064	0.0042	*
Venus	105009-12-28 02:52	G	40075170.42	40075170.62	40075170.84	0.0064	0.0015	
Venus	105010-08-10 06:13	G	40075395.67	40075395.76	40075395.88	0.0064	0.0056	
Moon	105010-11-29 07:25	G	40075506.60	40075506.81	40075507.07	0.0064	0.0028	
Earth	105010-11-29 10:47	G	40075506.75	40075506.95	40075507.20	0.0064	0.0031	*
Mercury	105090-07-11 08:09	G	40104585.78	40104585.84	40104585.91	0.0084	0.0072	
Mercury	105090-10-07 09:21	G	40104673.79	40104673.89	40104674.00	0.0084	0.0053	
Mercury	105091-01-03 10:33	G	40104761.82	40104761.94	40104762.07	0.0084	0.0035	
Mercury	105091-04-01 11:59	G	40104849.87	40104850.00	40104850.13	0.0084	0.0016	
Mercury	105091-06-28 13:11	G	40104937.91	40104938.05	40104938.18	0.0084	0.0003	
Mercury	105091-09-24 14:09	G	40105025.97	40105026.09	40105026.23	0.0084	0.0022	
Mercury	105091-12-21 15:35	G	40105114.03	40105114.15	40105114.26	0.0083	0.0040	
Mercury	105092-03-18 16:33	G	40105202.10	40105202.19	40105202.29	0.0083	0.0058	
Mercury	105092-06-14 17:45	G	40105290.20	40105290.24	40105290.30	0.0083	0.0077	
Venus	105098-11-19 16:18	G	40107638.96	40107639.18	40107639.41	0.0080	0.0015	
Moon	105099-05-29 18:42	G	40107830.03	40107830.28	40107830.55	0.0079	0.0022	
Earth	105099-05-29 19:25	G	40107830.06	40107830.31	40107830.57	0.0079	0.0018	*
Venus	105099-07-03 02:52	G	40107864.52	40107864.62	40107864.76	0.0079	0.0067	
Mercury	105243-08-06 22:33	G	40160494.43	40160494.44	40160494.49	0.0060	0.0059	
Mercury	105243-11-02 23:59	G	40160582.40	40160582.50	40160582.62	0.0060	0.0049	
Mercury	105244-01-30 00:57	G	40160670.42	40160670.54	40160670.71	0.0060	0.0040	
Mercury	105244-04-27 02:23	G	40160758.45	40160758.60	40160758.79	0.0060	0.0030	
Mercury	105244-07-24 04:04	G	40160846.49	40160846.67	40160846.86	0.0060	0.0020	
Mercury	105244-10-20 05:30	G	40160934.54	40160934.73	40160934.92	0.0060	0.0010	

Mercury	105245-01-16 06:42 G	40161022.59	40161022.78	40161022.98	0.0060	0.0001
Mercury	105245-04-14 07:54 G	40161110.64	40161110.83	40161111.03	0.0060	0.0010
Mercury	105245-07-11 09:21 G	40161198.71	40161198.89	40161199.08	0.0060	0.0019
Mercury	105245-10-07 10:33 G	40161286.78	40161286.94	40161287.12	0.0060	0.0029
Mercury	105246-01-03 11:30 G	40161374.85	40161374.98	40161375.15	0.0060	0.0040
Mercury	105246-04-01 12:42 G	40161462.95	40161463.03	40161463.17	0.0060	0.0050
Mercury	105246-06-28 13:54 G	40161551.08	40161551.08	40161551.15	0.0060	0.0060
Mars	105249-12-12 07:40 G	40162813.73	40162813.82	40162813.96	0.0061	0.0057
Venus	105257-04-19 22:33 G	40165499.39	40165499.44	40165499.54	0.0064	0.0060
Venus	105257-12-01 02:23 G	40165724.39	40165724.60	40165724.80	0.0064	0.0020
Venus	105258-07-14 05:16 G	40165949.53	40165949.72	40165949.94	0.0064	0.0020
Earth	105258-12-01 07:54 G	40166089.60	40166089.83	40166090.09	0.0064	0.0020
Moon	105258-12-01 11:45 G	40166089.75	40166089.99	40166090.23	0.0064	0.0022 *
Venus	105259-02-24 08:37 G	40166174.81	40166174.86	40166174.96	0.0064	0.0060
Moon	105259-12-02 17:16 G	40166456.12	40166456.22	40166456.36	0.0064	0.0057
Earth	105259-12-02 19:11 G	40166456.19	40166456.30	40166456.45	0.0064	0.0056 *
Mercury	105339-01-31 15:06 G	40195370.07	40195370.13	40195370.20	0.0084	0.0071
Mercury	105339-04-29 16:18 G	40195458.08	40195458.18	40195458.29	0.0084	0.0053
Mercury	105339-07-26 17:30 G	40195546.11	40195546.23	40195546.36	0.0084	0.0034
Mercury	105339-10-22 18:57 G	40195634.16	40195634.29	40195634.42	0.0084	0.0015
Mercury	105340-01-18 20:09 G	40195722.20	40195722.34	40195722.47	0.0084	0.0004
Mercury	105340-04-15 21:06 G	40195810.26	40195810.38	40195810.52	0.0084	0.0023
Mercury	105340-07-12 22:18 G	40195898.32	40195898.43	40195898.55	0.0083	0.0041
Mercury	105340-10-08 23:30 G	40195986.39	40195986.48	40195986.58	0.0083	0.0059
Mercury	105341-01-05 00:42 G	40196074.49	40196074.53	40196074.58	0.0083	0.0077
Mars	105342-12-22 15:35 G	40196790.81	40196791.15	40196791.50	0.0082	0.0007
Venus	105347-06-06 17:01 G	40198418.00	40198418.21	40198418.45	0.0080	0.0012
Venus	105348-01-18 04:04 G	40198643.57	40198643.67	40198643.78	0.0079	0.0070
Moon	105348-06-02 07:25 G	40198779.59	40198779.81	40198780.06	0.0079	0.0035
Earth	105348-06-02 10:47 G	40198779.73	40198779.95	40198780.20	0.0079	0.0035 *

Mercury	105492-02-27 04:33 G	40251278.62	40251278.69	40251278.82	0.0060	0.0052
Mercury	105492-05-25 05:59 G	40251366.63	40251366.75	40251366.91	0.0060	0.0042
Mercury	105492-08-21 07:40 G	40251454.66	40251454.82	40251454.99	0.0060	0.0032
Mercury	105492-11-17 09:06 G	40251542.70	40251542.88	40251543.06	0.0060	0.0022
Mercury	105493-02-13 10:04 G	40251630.75	40251630.92	40251631.13	0.0060	0.0013
Mercury	105493-05-12 11:45 G	40251718.80	40251718.99	40251719.18	0.0060	0.0003
Mercury	105493-08-08 12:57 G	40251806.85	40251807.04	40251807.24	0.0060	0.0007
Mercury	105493-11-04 14:09 G	40251894.91	40251895.09	40251895.29	0.0060	0.0017
Mercury	105494-01-31 15:21 G	40251982.98	40251983.14	40251983.33	0.0060	0.0027
Mercury	105494-04-29 16:33 G	40252071.06	40252071.19	40252071.36	0.0060	0.0037
Mercury	105494-07-26 18:13 G	40252159.14	40252159.26	40252159.39	0.0060	0.0047
Mercury	105494-10-22 19:25 G	40252247.26	40252247.31	40252247.38	0.0060	0.0057
Venus	105505-11-06 03:35 G	40256278.51	40256278.65	40256278.80	0.0064	0.0047
Venus	105506-06-19 06:42 G	40256503.58	40256503.78	40256504.01	0.0064	0.0008
Moon	105506-12-05 05:45 G	40256672.67	40256672.74	40256672.85	0.0064	0.0059
Earth	105506-12-05 07:40 G	40256672.80	40256672.82	40256672.93	0.0064	0.0062 *
Venus	105507-01-30 10:04 G	40256728.75	40256728.92	40256729.12	0.0064	0.0033
Earth	105507-12-06 19:40 G	40257039.08	40257039.32	40257039.58	0.0064	0.0014
Moon	105507-12-06 21:06 G	40257039.12	40257039.38	40257039.64	0.0064	0.0011 *
Mercury	105587-05-27 21:49 G	40286066.38	40286066.41	40286066.46	0.0084	0.0079
Mercury	105587-08-23 23:01 G	40286154.38	40286154.46	40286154.56	0.0084	0.0060
Mercury	105587-11-20 00:28 G	40286242.41	40286242.52	40286242.64	0.0084	0.0041
Mercury	105588-02-16 01:40 G	40286330.44	40286330.57	40286330.70	0.0084	0.0022
Mercury	105588-05-14 02:52 G	40286418.49	40286418.62	40286418.76	0.0084	0.0004
Mercury	105588-08-10 04:04 G	40286506.54	40286506.67	40286506.80	0.0084	0.0015
Mercury	105588-11-06 05:01 G	40286594.60	40286594.71	40286594.85	0.0083	0.0034
Mercury	105589-02-02 06:28 G	40286682.67	40286682.77	40286682.88	0.0083	0.0051
Mercury	105589-05-01 07:40 G	40286770.75	40286770.82	40286770.89	0.0083	0.0070
Mars	105591-04-01 17:45 G	40287470.99	40287471.24	40287471.52	0.0082	0.0053
Venus	105595-05-11 10:47 G	40288971.89	40288971.95	40288972.05	0.0080	0.0074

Venus	105595-12-22 22:04 G	40289197.20	40289197.42	40289197.65	0.0080	0.0009
Earth	105596-06-05 02:37 G	40289362.42	40289362.61	40289362.86	0.0080	0.0044
Moon	105596-06-05 05:59 G	40289362.57	40289362.75	40289362.99	0.0080	0.0048 *
Mercury	105740-06-22 09:21 G	40341974.84	40341974.89	40341975.01	0.0060	0.0054
Mercury	105740-09-18 11:01 G	40342062.85	40342062.96	40342063.11	0.0060	0.0044
Mercury	105740-12-15 12:28 G	40342150.87	40342151.02	40342151.19	0.0060	0.0034
Mercury	105741-03-13 13:40 G	40342238.91	40342239.07	40342239.26	0.0060	0.0025
Mercury	105741-06-09 15:06 G	40342326.95	40342327.13	40342327.33	0.0060	0.0015
Mercury	105741-09-05 16:33 G	40342415.00	40342415.19	40342415.39	0.0060	0.0005
Mercury	105741-12-02 17:59 G	40342503.06	40342503.25	40342503.44	0.0060	0.0005
Mercury	105742-02-28 18:57 G	40342591.12	40342591.29	40342591.49	0.0060	0.0015
Mercury	105742-05-27 20:09 G	40342679.18	40342679.34	40342679.54	0.0060	0.0025
Mercury	105742-08-23 21:49 G	40342767.26	40342767.41	40342767.57	0.0060	0.0034
Mercury	105742-11-19 23:01 G	40342855.34	40342855.46	40342855.60	0.0060	0.0044
Mercury	105743-02-16 00:13 G	40342943.44	40342943.51	40342943.61	0.0060	0.0054
Venus	105754-05-23 07:54 G	40347057.67	40347057.83	40347058.04	0.0064	0.0035
Venus	105755-01-03 11:45 G	40347282.78	40347282.99	40347283.21	0.0064	0.0005
Venus	105755-08-16 14:52 G	40347507.98	40347508.12	40347508.29	0.0064	0.0045
Moon	105755-12-08 18:13 G	40347622.03	40347622.26	40347622.50	0.0064	0.0029
Earth	105755-12-08 20:23 G	40347622.13	40347622.35	40347622.59	0.0064	0.0028 *
Earth	105756-12-09 07:54 G	40347988.67	40347988.83	40347989.02	0.0065	0.0048
Moon	105756-12-09 11:01 G	40347988.82	40347988.96	40347989.16	0.0065	0.0049 *
Mercury	105835-12-18 06:13 G	40376850.68	40376850.76	40376850.84	0.0084	0.0067
Mercury	105836-03-15 07:11 G	40376938.70	40376938.80	40376938.92	0.0084	0.0048
Mercury	105836-06-11 08:37 G	40377026.74	40377026.86	40377026.99	0.0084	0.0029
Mercury	105836-09-07 09:49 G	40377114.78	40377114.91	40377115.05	0.0084	0.0010
Mercury	105836-12-04 11:01 G	40377202.83	40377202.96	40377203.10	0.0084	0.0008
Mercury	105837-03-02 12:13 G	40377290.89	40377291.01	40377291.14	0.0084	0.0027
Mercury	105837-05-29 13:11 G	40377378.95	40377379.05	40377379.18	0.0083	0.0046
Mercury	105837-08-25 14:23 G	40377467.03	40377467.10	40377467.20	0.0083	0.0064

Mercury	105837-11-21 15:49 G	40377555.14	40377555.16	40377555.19	0.0083	0.0081
Venus	105843-11-26 16:04 G	40379751.02	40379751.17	40379751.37	0.0080	0.0052
Venus	105844-07-09 03:20 G	40379976.44	40379976.64	40379976.86	0.0080	0.0031
Earth	105845-06-10 01:11 G	40380312.33	40380312.55	40380312.81	0.0079	0.0030
Moon	105845-06-10 05:16 G	40380312.48	40380312.72	40380312.96	0.0079	0.0034 *
Mercury	105988-10-16 15:35 G	40432671.07	40432671.15	40432671.28	0.0060	0.0051
Mercury	105989-01-12 17:01 G	40432759.09	40432759.21	40432759.37	0.0060	0.0041
Mercury	105989-04-10 18:28 G	40432847.12	40432847.27	40432847.45	0.0060	0.0031
Mercury	105989-07-07 20:08 G	40432935.16	40432935.34	40432935.52	0.0060	0.0021
Mercury	105989-10-03 21:06 G	40433023.20	40433023.38	40433023.59	0.0060	0.0012
Mercury	105989-12-30 22:47 G	40433111.25	40433111.45	40433111.64	0.0060	0.0002
Mercury	105990-03-28 23:59 G	40433199.31	40433199.50	40433199.70	0.0060	0.0008
Mercury	105990-06-25 01:11 G	40433287.37	40433287.55	40433287.75	0.0060	0.0018
Mercury	105990-09-21 02:23 G	40433375.44	40433375.60	40433375.79	0.0060	0.0028
Mercury	105990-12-18 03:35 G	40433463.52	40433463.65	40433463.82	0.0060	0.0038
Mercury	105991-03-16 05:16 G	40433551.61	40433551.72	40433551.84	0.0060	0.0048
Mercury	105991-06-12 06:28 G	40433639.73	40433639.77	40433639.84	0.0060	0.0058

# 107TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 107th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Venus	106002-04-27 11:44 G	40437611.89	40437611.99	40437612.14	0.0064	0.0053		



Venus	106002-12-08 15:35 G	40437836.94	40437837.15	40437837.36	0.0064	0.0013
Venus	106003-07-21 18:28 G	40438062.09	40438062.27	40438062.49	0.0064	0.0027
Moon	106003-12-11 22:47 G	40438205.37	40438205.45	40438205.61	0.0064	0.0057
Earth	106003-12-12 01:11 G	40438205.47	40438205.55	40438205.65	0.0064	0.0060 *
Earth	106004-12-12 12:28 G	40438571.79	40438572.02	40438572.28	0.0064	0.0016
Moon	106004-12-12 15:35 G	40438571.92	40438572.15	40438572.41	0.0064	0.0013 *
Mercury	106084-01-14 12:56 G	40467459.02	40467459.04	40467459.08	0.0084	0.0082
Mercury	106084-04-11 13:54 G	40467547.01	40467547.08	40467547.18	0.0084	0.0064
Mercury	106084-07-08 15:20 G	40467635.03	40467635.14	40467635.26	0.0084	0.0044
Mercury	106084-10-04 16:47 G	40467723.07	40467723.20	40467723.32	0.0084	0.0025
Mercury	106084-12-31 17:59 G	40467811.11	40467811.25	40467811.38	0.0084	0.0007
Mercury	106085-03-29 19:11 G	40467899.16	40467899.30	40467899.43	0.0084	0.0012
Mercury	106085-06-25 20:08 G	40467987.22	40467987.34	40467987.47	0.0084	0.0030
Mercury	106085-09-21 21:20 G	40468075.29	40468075.39	40468075.50	0.0083	0.0049
Mercury	106085-12-18 22:47 G	40468163.37	40468163.45	40468163.52	0.0083	0.0067
Venus	106092-06-12 01:40 G	40470530.35	40470530.57	40470530.80	0.0080	0.0012
Venus	106093-01-23 12:13 G	40470755.92	40470756.01	40470756.14	0.0080	0.0070
Earth	106093-06-12 00:56 G	40470895.29	40470895.54	40470895.79	0.0079	0.0026
Moon	106093-06-12 01:25 G	40470895.33	40470895.56	40470895.80	0.0079	0.0030 *
Mercury	106236-11-13 20:23 G	40523279.32	40523279.35	40523279.44	0.0060	0.0057
Mercury	106237-02-09 22:04 G	40523367.31	40523367.42	40523367.55	0.0060	0.0047
Mercury	106237-05-08 23:30 G	40523455.33	40523455.48	40523455.64	0.0060	0.0037
Mercury	106237-08-05 00:28 G	40523543.37	40523543.52	40523543.71	0.0060	0.0028
Mercury	106237-11-01 02:08 G	40523631.41	40523631.59	40523631.78	0.0060	0.0018
Mercury	106238-01-28 03:35 G	40523719.46	40523719.65	40523719.84	0.0060	0.0008
Mercury	106238-04-26 04:47 G	40523807.51	40523807.70	40523807.90	0.0060	0.0002
Mercury	106238-07-23 06:13 G	40523895.57	40523895.76	40523895.95	0.0060	0.0011
Mercury	106238-10-19 07:25 G	40523983.63	40523983.81	40523984.00	0.0060	0.0021
Mercury	106239-01-15 08:37 G	40524071.70	40524071.86	40524072.04	0.0060	0.0031
Mercury	106239-04-13 09:49 G	40524159.79	40524159.91	40524160.07	0.0060	0.0041

Mercury	106239-07-10 11:01 G	40524247.88	40524247.96	40524248.08	0.0060	0.0051
Venus	106250-11-12 19:11 G	40528391.12	40528391.30	40528391.50	0.0064	0.0031
Venus	106251-06-25 22:32 G	40528616.23	40528616.44	40528616.66	0.0064	0.0009
Venus	106252-02-06 01:54 G	40528841.45	40528841.58	40528841.73	0.0064	0.0049
Moon	106252-12-15 15:20 G	40529154.90	40529155.14	40529155.39	0.0064	0.0014
Earth	106252-12-15 17:16 G	40529154.98	40529155.22	40529155.48	0.0064	0.0015 *
Moon	106253-12-17 04:32 G	40529521.63	40529521.69	40529521.83	0.0065	0.0060
Earth	106253-12-17 04:32 G	40529521.64	40529521.69	40529521.80	0.0065	0.0062 *
Mercury	106332-05-10 21:20 G	40558155.34	40558155.39	40558155.45	0.0084	0.0076
Mercury	106332-08-06 22:18 G	40558243.35	40558243.43	40558243.54	0.0084	0.0057
Mercury	106332-11-02 23:44 G	40558331.37	40558331.49	40558331.61	0.0084	0.0038
Mercury	106333-01-30 00:56 G	40558419.41	40558419.54	40558419.67	0.0084	0.0020
Mercury	106333-04-28 02:08 G	40558507.46	40558507.59	40558507.73	0.0084	0.0002
Mercury	106333-07-25 03:20 G	40558595.51	40558595.64	40558595.77	0.0084	0.0017
Mercury	106333-10-21 04:32 G	40558683.57	40558683.69	40558683.81	0.0084	0.0036
Mercury	106334-01-17 05:30 G	40558771.64	40558771.73	40558771.84	0.0083	0.0054
Mercury	106334-04-15 06:42 G	40558859.73	40558859.78	40558859.85	0.0083	0.0072
Venus	106340-05-18 00:42 G	40561084.37	40561084.53	40561084.71	0.0080	0.0051
Venus	106340-12-29 11:44 G	40561309.79	40561309.99	40561310.20	0.0080	0.0031
Moon	106341-06-15 21:06 G	40561478.32	40561478.38	40561478.50	0.0080	0.0075
Earth	106341-06-16 00:56 G	40561478.51	40561478.54	40561478.62	0.0080	0.0078
Earth	106342-06-18 06:28 G	40561845.66	40561845.77	40561845.90	0.0079	0.0069
Moon	106342-06-18 09:35 G	40561845.78	40561845.90	40561846.07	0.0079	0.0066 *
Mercury	106484-12-11 02:37 G	40613887.57	40613887.61	40613887.66	0.0060	0.0058
Mercury	106485-03-09 03:35 G	40613975.56	40613975.65	40613975.78	0.0060	0.0049
Mercury	106485-06-05 05:01 G	40614063.58	40614063.71	40614063.87	0.0060	0.0039
Mercury	106485-09-01 06:42 G	40614151.61	40614151.78	40614151.95	0.0060	0.0029
Mercury	106485-11-28 07:40 G	40614239.65	40614239.82	40614240.02	0.0060	0.0020
Mercury	106486-02-24 09:06 G	40614327.70	40614327.88	40614328.08	0.0060	0.0010
Mercury	106486-05-23 10:47 G	40614415.75	40614415.95	40614416.14	0.0060	0.0001

Mercury	106486-08-19 11:59 G	40614503.81	40614504.00	40614504.19	0.0060	0.0010
Mercury	106486-11-15 12:56 G	40614591.87	40614592.04	40614592.24	0.0060	0.0020
Mercury	106487-02-11 14:37 G	40614679.94	40614680.11	40614680.28	0.0060	0.0029
Mercury	106487-05-10 15:49 G	40614768.02	40614768.16	40614768.32	0.0060	0.0039
Mercury	106487-08-06 17:01 G	40614856.12	40614856.21	40614856.34	0.0060	0.0049
Mercury	106487-11-02 18:13 G	40614944.25	40614944.26	40614944.31	0.0060	0.0060
Venus	106498-10-17 01:25 G	40618945.40	40618945.56	40618945.72	0.0064	0.0041
Venus	106499-05-30 04:47 G	40619170.48	40619170.70	40619170.91	0.0064	0.0002
Venus	106500-01-10 07:40 G	40619395.67	40619395.82	40619396.01	0.0064	0.0038
Moon	106500-12-19 00:42 G	40619738.33	40619738.53	40619738.78	0.0064	0.0036
Earth	106500-12-19 01:25 G	40619738.37	40619738.56	40619738.79	0.0064	0.0038 *
Earth	106501-12-20 13:40 G	40620104.87	40620105.07	40620105.27	0.0065	0.0039
Moon	106501-12-20 15:49 G	40620104.96	40620105.16	40620105.37	0.0065	0.0037 *
Mercury	106580-06-07 05:16 G	40648763.69	40648763.72	40648763.76	0.0084	0.0081
Mercury	106580-09-03 06:13 G	40648851.68	40648851.76	40648851.86	0.0084	0.0062
Mercury	106580-11-30 07:40 G	40648939.71	40648939.82	40648939.94	0.0084	0.0043
Mercury	106581-02-26 08:52 G	40649027.74	40649027.87	40649028.00	0.0084	0.0025
Mercury	106581-05-25 10:04 G	40649115.79	40649115.92	40649116.05	0.0084	0.0006
Mercury	106581-08-21 11:16 G	40649203.84	40649203.97	40649204.10	0.0084	0.0012
Mercury	106581-11-17 12:28 G	40649291.90	40649292.02	40649292.14	0.0084	0.0031
Mercury	106582-02-13 13:40 G	40649379.96	40649380.07	40649380.18	0.0083	0.0049
Mercury	106582-05-12 14:37 G	40649468.04	40649468.11	40649468.20	0.0083	0.0067
Venus	106588-04-21 02:23 G	40651638.56	40651638.60	40651638.67	0.0080	0.0078
Venus	106588-12-02 13:40 G	40651863.85	40651864.07	40651864.30	0.0080	0.0006
Moon	106590-06-20 09:49 G	40652428.70	40652428.91	40652429.16	0.0079	0.0032
Earth	106590-06-20 11:30 G	40652428.76	40652428.98	40652429.24	0.0079	0.0033 *
Mercury	106733-01-09 08:08 G	40704495.84	40704495.84	40704495.87	0.0059	0.0059
Mercury	106733-04-07 09:35 G	40704583.81	40704583.90	40704584.02	0.0060	0.0050
Mercury	106733-07-04 11:16 G	40704671.82	40704671.97	40704672.11	0.0060	0.0040
Mercury	106733-09-30 12:13 G	40704759.86	40704760.01	40704760.19	0.0060	0.0031

Mercury	106733-12-27 13:40 G	40704847.90	40704848.07	40704848.26	0.0060	0.0021
Mercury	106734-03-25 15:06 G	40704935.94	40704936.13	40704936.33	0.0060	0.0011
Mercury	106734-06-21 16:32 G	40705023.99	40705024.19	40705024.39	0.0060	0.0001
Mercury	106734-09-17 17:44 G	40705112.05	40705112.24	40705112.44	0.0060	0.0009
Mercury	106734-12-14 19:11 G	40705200.12	40705200.30	40705200.49	0.0060	0.0018
Mercury	106735-03-12 20:08 G	40705288.19	40705288.34	40705288.53	0.0060	0.0029
Mercury	106735-06-08 21:20 G	40705376.26	40705376.39	40705376.56	0.0060	0.0039
Mercury	106735-09-04 22:32 G	40705464.35	40705464.44	40705464.59	0.0060	0.0049
Mercury	106735-12-02 00:28 G	40705552.47	40705552.52	40705552.58	0.0060	0.0058
Venus	106746-09-22 06:28 G	40709499.67	40709499.77	40709499.93	0.0063	0.0052
Venus	106747-05-05 10:18 G	40709724.73	40709724.93	40709725.15	0.0064	0.0012
Venus	106747-12-16 13:25 G	40709949.88	40709950.06	40709950.27	0.0064	0.0028
Earth	106748-12-22 09:20 G	40710321.82	40710321.89	40710322.02	0.0064	0.0060
Moon	106748-12-22 12:28 G	40710321.99	40710322.02	40710322.11	0.0064	0.0063 *
Moon	106749-12-23 17:59 G	40710688.02	40710688.25	40710688.50	0.0065	0.0021
Earth	106749-12-23 21:49 G	40710688.16	40710688.41	40710688.66	0.0065	0.0017 *
Mercury	106828-07-05 13:11 G	40739372.04	40739372.05	40739372.07	0.0084	0.0084
Mercury	106828-10-01 14:23 G	40739460.03	40739460.10	40739460.19	0.0084	0.0065
Mercury	106828-12-28 15:35 G	40739548.05	40739548.15	40739548.27	0.0084	0.0046
Mercury	106829-03-26 17:01 G	40739636.09	40739636.21	40739636.34	0.0084	0.0027
Mercury	106829-06-22 18:13 G	40739724.13	40739724.26	40739724.39	0.0084	0.0009
Mercury	106829-09-18 19:25 G	40739812.18	40739812.31	40739812.44	0.0084	0.0009
Mercury	106829-12-15 20:37 G	40739900.23	40739900.36	40739900.48	0.0084	0.0028
Mercury	106830-03-13 21:35 G	40739988.30	40739988.40	40739988.52	0.0084	0.0046
Mercury	106830-06-09 22:47 G	40740076.38	40740076.45	40740076.54	0.0083	0.0064
Mercury	106830-09-05 23:59 G	40740164.49	40740164.50	40740164.52	0.0083	0.0082
Venus	106836-11-06 16:47 G	40742417.98	40742418.20	40742418.42	0.0080	0.0016
Venus	106837-06-20 03:35 G	40742643.54	40742643.65	40742643.79	0.0080	0.0066
Moon	106838-06-23 17:30 G	40743011.97	40743012.23	40743012.51	0.0079	0.0006
Earth	106838-06-23 18:56 G	40743012.03	40743012.29	40743012.55	0.0079	0.0001 *

Mercury	106981-02-05 14:37 G	40795104.08	40795104.11	40795104.20	0.0060	0.0057
Mercury	106981-05-04 16:18 G	40795192.07	40795192.18	40795192.31	0.0060	0.0047
Mercury	106981-07-31 17:44 G	40795280.10	40795280.24	40795280.40	0.0060	0.0037
Mercury	106981-10-27 18:56 G	40795368.13	40795368.29	40795368.48	0.0060	0.0028
Mercury	106982-01-23 20:23 G	40795456.17	40795456.35	40795456.55	0.0060	0.0018
Mercury	106982-04-21 21:49 G	40795544.22	40795544.41	40795544.61	0.0060	0.0008
Mercury	106982-07-18 23:16 G	40795632.28	40795632.47	40795632.67	0.0060	0.0002
Mercury	106982-10-15 00:28 G	40795720.34	40795720.52	40795720.72	0.0060	0.0012
Mercury	106983-01-11 01:54 G	40795808.40	40795808.58	40795808.77	0.0060	0.0021
Mercury	106983-04-09 03:06 G	40795896.47	40795896.63	40795896.81	0.0060	0.0031
Mercury	106983-07-06 04:18 G	40795984.55	40795984.68	40795984.84	0.0060	0.0041
Mercury	106983-10-02 05:30 G	40796072.65	40796072.73	40796072.86	0.0060	0.0051
Venus	106994-08-26 14:37 G	40800054.01	40800054.11	40800054.24	0.0063	0.0054
Venus	106995-04-08 18:13 G	40800279.05	40800279.26	40800279.47	0.0064	0.0015
Venus	106995-11-19 21:20 G	40800504.21	40800504.39	40800504.61	0.0064	0.0025
Earth	106997-12-26 09:35 G	40801271.64	40801271.90	40801272.15	0.0065	0.0004
Moon	106997-12-26 11:16 G	40801271.71	40801271.97	40801272.24	0.0065	0.0004 *

# 108TH MILLENNIUM CE

**This is a list of transits visible from Pluto in the 108th millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	107076-08-02 22:04 G	40829980.39	40829980.42	40829980.47	0.0084	0.0080		

Mercury	107076-10-29 23:16 G	40830068.39	40830068.47	40830068.57	0.0084	0.0061
Mercury	107077-01-26 00:28 G	40830156.41	40830156.52	40830156.64	0.0084	0.0043
Mercury	107077-04-24 01:40 G	40830244.45	40830244.57	40830244.70	0.0084	0.0024
Mercury	107077-07-21 03:06 G	40830332.49	40830332.63	40830332.76	0.0084	0.0006
Mercury	107077-10-17 04:18 G	40830420.54	40830420.68	40830420.81	0.0084	0.0013
Mercury	107078-01-13 05:16 G	40830508.60	40830508.72	40830508.85	0.0084	0.0031
Mercury	107078-04-11 06:28 G	40830596.67	40830596.77	40830596.88	0.0084	0.0049
Mercury	107078-07-08 07:40 G	40830684.75	40830684.82	40830684.90	0.0083	0.0068
Mars	107080-11-27 08:52 G	40831557.64	40831557.87	40831558.15	0.0082	0.0055
Venus	107084-10-11 21:35 G	40832972.20	40832972.40	40832972.62	0.0080	0.0027
Venus	107085-05-25 08:52 G	40833197.71	40833197.87	40833198.04	0.0080	0.0055
Earth	107086-06-27 04:47 G	40833595.46	40833595.70	40833595.97	0.0079	0.0019
Moon	107086-06-27 08:37 G	40833595.62	40833595.86	40833596.12	0.0079	0.0021 *
Mercury	107229-03-05 21:35 G	40885712.33	40885712.40	40885712.52	0.0060	0.0053
Mercury	107229-06-01 23:16 G	40885800.35	40885800.47	40885800.61	0.0060	0.0043
Mercury	107229-08-29 00:13 G	40885888.37	40885888.51	40885888.70	0.0060	0.0034
Mercury	107229-11-25 01:54 G	40885976.41	40885976.58	40885976.77	0.0060	0.0024
Mercury	107230-02-21 03:20 G	40886064.46	40886064.64	40886064.84	0.0060	0.0014
Mercury	107230-05-20 04:47 G	40886152.51	40886152.70	40886152.90	0.0060	0.0004
Mercury	107230-08-16 05:59 G	40886240.57	40886240.75	40886240.95	0.0060	0.0006
Mercury	107230-11-12 07:25 G	40886328.63	40886328.81	40886329.01	0.0060	0.0015
Mercury	107231-02-08 08:37 G	40886416.70	40886416.86	40886417.05	0.0060	0.0025
Mercury	107231-05-07 09:49 G	40886504.77	40886504.91	40886505.09	0.0060	0.0035
Mercury	107231-08-03 11:01 G	40886592.86	40886592.96	40886593.11	0.0060	0.0045
Mercury	107231-10-30 12:56 G	40886680.96	40886681.04	40886681.12	0.0060	0.0055
Venus	107242-07-31 22:32 G	40890608.35	40890608.44	40890608.56	0.0063	0.0056
Venus	107243-03-14 01:54 G	40890833.38	40890833.58	40890833.80	0.0064	0.0017
Venus	107243-10-25 05:30 G	40891058.54	40891058.73	40891058.94	0.0064	0.0023
Venus	107244-06-06 08:37 G	40891283.85	40891283.86	40891283.92	0.0064	0.0063
Earth	107245-12-29 21:20 G	40891855.14	40891855.39	40891855.65	0.0065	0.0008

Moon	107245-12-29 22:32 G	40891855.20	40891855.44	40891855.69	0.0065	0.0011	*
Mercury	107324-08-31 07:11 G	40920588.74	40920588.80	40920588.87	0.0084	0.0073	
Mercury	107324-11-27 08:23 G	40920676.76	40920676.85	40920676.96	0.0084	0.0054	
Mercury	107325-02-23 09:35 G	40920764.79	40920764.90	40920765.03	0.0084	0.0035	
Mercury	107325-05-22 10:47 G	40920852.83	40920852.95	40920853.09	0.0084	0.0017	
Mercury	107325-08-18 12:13 G	40920940.87	40920941.01	40920941.14	0.0084	0.0003	
Mercury	107325-11-14 13:25 G	40921028.93	40921029.06	40921029.19	0.0084	0.0020	
Mercury	107326-02-10 14:23 G	40921116.99	40921117.10	40921117.22	0.0084	0.0038	
Mercury	107326-05-09 15:35 G	40921205.06	40921205.15	40921205.25	0.0084	0.0057	
Mercury	107326-08-05 16:47 G	40921293.15	40921293.20	40921293.26	0.0083	0.0075	
Mars	107329-03-09 12:56 G	40922239.70	40922240.04	40922240.38	0.0082	0.0003	
Venus	107332-09-16 04:04 G	40923526.48	40923526.67	40923526.90	0.0080	0.0032	
Venus	107333-04-29 15:20 G	40923751.99	40923752.14	40923752.33	0.0080	0.0052	
Moon	107334-06-30 15:20 G	40924178.92	40924179.14	40924179.38	0.0079	0.0033	
Earth	107334-06-30 17:59 G	40924179.02	40924179.25	40924179.50	0.0079	0.0031	*
Mercury	107477-01-05 04:18 G	40976232.62	40976232.68	40976232.78	0.0060	0.0054	
Mercury	107477-04-03 05:59 G	40976320.63	40976320.75	40976320.89	0.0060	0.0044	
Mercury	107477-06-30 06:56 G	40976408.65	40976408.79	40976408.97	0.0060	0.0035	
Mercury	107477-09-26 08:37 G	40976496.69	40976496.86	40976497.05	0.0060	0.0025	
Mercury	107477-12-23 10:04 G	40976584.73	40976584.92	40976585.11	0.0060	0.0015	
Mercury	107478-03-21 11:16 G	40976672.78	40976672.97	40976673.17	0.0060	0.0006	
Mercury	107478-06-17 12:42 G	40976760.84	40976761.03	40976761.23	0.0060	0.0004	
Mercury	107478-09-13 13:54 G	40976848.90	40976849.08	40976849.28	0.0060	0.0014	
Mercury	107478-12-10 15:06 G	40976936.97	40976937.13	40976937.33	0.0060	0.0024	
Mercury	107479-03-08 16:18 G	40977025.04	40977025.18	40977025.36	0.0060	0.0034	
Mercury	107479-06-04 17:59 G	40977113.13	40977113.25	40977113.39	0.0060	0.0044	
Mercury	107479-08-31 19:11 G	40977201.23	40977201.30	40977201.40	0.0060	0.0054	
Venus	107490-07-06 08:52 G	40981162.75	40981162.87	40981163.01	0.0063	0.0050	
Venus	107491-02-16 12:13 G	40981387.80	40981388.01	40981388.23	0.0064	0.0011	
Venus	107491-09-29 15:35 G	40981612.97	40981613.15	40981613.35	0.0064	0.0029	

Moon	107494-01-02 09:35 G	40982438.65	40982438.90	40982439.16	0.0065	0.0008
Earth	107494-01-02 12:56 G	40982438.80	40982439.04	40982439.30	0.0065	0.0011 *
Moon	107495-01-04 03:49 G	40982805.65	40982805.66	40982805.73	0.0065	0.0064
Mercury	107572-07-02 15:49 G	41011109.12	41011109.16	41011109.22	0.0084	0.0077
Mercury	107572-09-28 17:15 G	41011197.13	41011197.22	41011197.31	0.0084	0.0059
Mercury	107572-12-25 18:13 G	41011285.15	41011285.26	41011285.39	0.0084	0.0041
Mercury	107573-03-23 19:39 G	41011373.19	41011373.32	41011373.45	0.0084	0.0022
Mercury	107573-06-19 20:51 G	41011461.24	41011461.37	41011461.50	0.0084	0.0003
Mercury	107573-09-15 22:03 G	41011549.29	41011549.42	41011549.55	0.0084	0.0015
Mercury	107573-12-12 23:01 G	41011637.35	41011637.46	41011637.59	0.0084	0.0034
Mercury	107574-03-11 00:13 G	41011725.41	41011725.51	41011725.62	0.0084	0.0052
Mercury	107574-06-07 01:25 G	41011813.49	41011813.56	41011813.64	0.0083	0.0070
Mars	107577-06-20 00:27 G	41012922.46	41012922.52	41012922.63	0.0082	0.0079
Venus	107580-08-21 13:25 G	41014080.85	41014081.06	41014081.28	0.0080	0.0024
Venus	107581-04-04 00:27 G	41014306.38	41014306.52	41014306.69	0.0080	0.0058
Earth	107582-07-04 10:32 G	41014762.70	41014762.94	41014763.18	0.0079	0.0032
Moon	107582-07-04 11:01 G	41014762.71	41014762.96	41014763.21	0.0079	0.0028 *
Mercury	107724-11-06 11:30 G	41066752.90	41066752.98	41066753.08	0.0060	0.0053
Mercury	107725-02-02 12:27 G	41066840.91	41066841.02	41066841.18	0.0060	0.0044
Mercury	107725-05-01 14:08 G	41066928.94	41066929.09	41066929.27	0.0060	0.0034
Mercury	107725-07-28 15:35 G	41067016.98	41067017.15	41067017.34	0.0060	0.0024
Mercury	107725-10-24 16:47 G	41067105.03	41067105.20	41067105.41	0.0060	0.0015
Mercury	107726-01-20 18:27 G	41067193.08	41067193.27	41067193.47	0.0060	0.0005
Mercury	107726-04-18 19:54 G	41067281.13	41067281.33	41067281.52	0.0060	0.0005
Mercury	107726-07-15 20:51 G	41067369.19	41067369.37	41067369.57	0.0060	0.0015
Mercury	107726-10-11 22:03 G	41067457.26	41067457.42	41067457.62	0.0060	0.0025
Mercury	107727-01-07 23:44 G	41067545.34	41067545.49	41067545.66	0.0060	0.0034
Mercury	107727-04-06 00:56 G	41067633.42	41067633.54	41067633.68	0.0060	0.0044
Mercury	107727-07-03 02:08 G	41067721.53	41067721.59	41067721.69	0.0060	0.0054
Mars	107732-09-24 11:15 G	41069631.75	41069631.97	41069632.23	0.0062	0.0036



Venus	107738-06-10 19:54 G	41071717.18	41071717.33	41071717.51	0.0063	0.0041
Venus	107739-01-21 23:30 G	41071942.26	41071942.48	41071942.69	0.0064	0.0002
Venus	107739-09-04 02:23 G	41072167.44	41072167.60	41072167.79	0.0064	0.0038
Earth	107742-01-06 05:44 G	41073022.50	41073022.74	41073023.01	0.0065	0.0010
Moon	107742-01-06 09:20 G	41073022.64	41073022.89	41073023.15	0.0065	0.0008 *
Mercury	107820-05-04 01:11 G	41101629.50	41101629.55	41101629.61	0.0084	0.0076
Mercury	107820-07-31 02:37 G	41101717.51	41101717.61	41101717.70	0.0084	0.0057
Mercury	107820-10-27 03:35 G	41101805.54	41101805.65	41101805.78	0.0084	0.0039
Mercury	107821-01-23 04:47 G	41101893.58	41101893.70	41101893.84	0.0084	0.0020
Mercury	107821-04-21 06:13 G	41101981.63	41101981.76	41101981.89	0.0084	0.0002
Mercury	107821-07-18 07:25 G	41102069.68	41102069.81	41102069.94	0.0084	0.0017
Mercury	107821-10-14 08:37 G	41102157.74	41102157.86	41102157.98	0.0084	0.0035
Mercury	107822-01-10 09:20 G	41102245.80	41102245.89	41102246.01	0.0084	0.0054
Mercury	107822-04-08 10:32 G	41102333.89	41102333.94	41102334.02	0.0083	0.0072
Venus	107828-07-27 01:25 G	41104635.33	41104635.56	41104635.78	0.0080	0.0005
Venus	107829-03-09 11:59 G	41104860.96	41104861.00	41104861.08	0.0080	0.0077
Earth	107830-07-08 07:11 G	41105346.56	41105346.80	41105347.07	0.0079	0.0018
Moon	107830-07-08 09:20 G	41105346.65	41105346.89	41105347.14	0.0079	0.0017 *
Mercury	107972-06-11 18:27 G	41157185.22	41157185.27	41157185.35	0.0060	0.0056
Mercury	107972-09-07 19:39 G	41157273.22	41157273.32	41157273.46	0.0060	0.0047
Mercury	107972-12-04 21:06 G	41157361.24	41157361.38	41157361.55	0.0060	0.0037
Mercury	107973-03-02 22:18 G	41157449.28	41157449.43	41157449.62	0.0060	0.0028
Mercury	107973-05-29 23:44 G	41157537.32	41157537.49	41157537.69	0.0060	0.0018
Mercury	107973-08-26 01:25 G	41157625.37	41157625.56	41157625.75	0.0060	0.0008
Mercury	107973-11-22 02:51 G	41157713.42	41157713.62	41157713.81	0.0060	0.0002
Mercury	107974-02-18 04:03 G	41157801.48	41157801.67	41157801.86	0.0060	0.0011
Mercury	107974-05-17 05:15 G	41157889.55	41157889.72	41157889.91	0.0060	0.0021
Mercury	107974-08-13 06:27 G	41157977.62	41157977.77	41157977.95	0.0060	0.0031
Mercury	107974-11-09 07:39 G	41158065.70	41158065.82	41158065.98	0.0060	0.0041
Mercury	107975-02-05 09:20 G	41158153.79	41158153.89	41158154.00	0.0060	0.0051

Mars	107981-01-05 01:25 G	41160314.26	41160314.56	41160314.85	0.0062	0.0005
Venus	107985-10-03 05:30 G	41162046.72	41162046.73	41162046.80	0.0063	0.0063
Venus	107986-05-16 09:06 G	41162271.69	41162271.88	41162272.09	0.0064	0.0024
Venus	107986-12-27 12:27 G	41162496.82	41162497.02	41162497.24	0.0064	0.0016
Venus	107987-08-09 15:49 G	41162722.06	41162722.16	41162722.27	0.0064	0.0055
Moon	107990-01-10 01:39 G	41163606.32	41163606.57	41163606.82	0.0065	0.0001
Earth	107990-01-10 03:06 G	41163606.37	41163606.63	41163606.89	0.0065	0.0003 *

# 109TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 109th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	108068-03-04 11:15 G		41192149.90	41192149.97	41192150.06	0.0084	0.0066	
Mercury	108068-05-31 12:27 G		41192237.92	41192238.02	41192238.14	0.0084	0.0048	
Mercury	108068-08-27 13:39 G		41192325.95	41192326.07	41192326.20	0.0084	0.0030	
Mercury	108068-11-23 15:06 G		41192414.00	41192414.13	41192414.26	0.0084	0.0011	
Mercury	108069-02-19 16:18 G		41192502.05	41192502.18	41192502.31	0.0084	0.0007	
Mercury	108069-05-18 17:15 G		41192590.10	41192590.22	41192590.35	0.0084	0.0026	
Mercury	108069-08-14 18:27 G		41192678.16	41192678.27	41192678.39	0.0084	0.0044	
Mercury	108069-11-10 19:39 G		41192766.24	41192766.32	41192766.41	0.0084	0.0062	
Mercury	108070-02-06 20:51 G		41192854.34	41192854.37	41192854.41	0.0083	0.0080	
Venus	108075-11-18 04:32 G		41194964.55	41194964.69	41194964.86	0.0080	0.0058	
Venus	108076-06-30 15:49 G		41195189.95	41195190.16	41195190.38	0.0080	0.0025	

Moon	108078-07-11 05:01 G	41195930.45	41195930.71	41195930.97	0.0079	0.0003
Earth	108078-07-11 08:23 G	41195930.60	41195930.85	41195931.12	0.0079	0.0008 *
Mercury	108220-01-16 02:08 G	41247617.53	41247617.59	41247617.66	0.0060	0.0056
Mercury	108220-04-13 03:06 G	41247705.53	41247705.63	41247705.77	0.0060	0.0047
Mercury	108220-07-10 04:47 G	41247793.55	41247793.70	41247793.86	0.0060	0.0037
Mercury	108220-10-06 05:44 G	41247881.59	41247881.74	41247881.94	0.0060	0.0028
Mercury	108221-01-02 07:25 G	41247969.63	41247969.81	41247970.00	0.0060	0.0018
Mercury	108221-03-31 08:51 G	41248057.68	41248057.87	41248058.07	0.0060	0.0008
Mercury	108221-06-27 10:18 G	41248145.73	41248145.93	41248146.13	0.0060	0.0002
Mercury	108221-09-23 11:30 G	41248233.79	41248233.98	41248234.18	0.0060	0.0011
Mercury	108221-12-20 12:42 G	41248321.86	41248322.03	41248322.23	0.0060	0.0021
Mercury	108222-03-18 13:54 G	41248409.93	41248410.08	41248410.27	0.0060	0.0031
Mercury	108222-06-14 15:35 G	41248498.01	41248498.15	41248498.30	0.0060	0.0041
Mercury	108222-09-10 16:47 G	41248586.11	41248586.20	41248586.32	0.0060	0.0050
Mercury	108222-12-07 18:27 G	41248674.27	41248674.27	41248674.27	0.0060	0.0060
Mars	108229-04-17 17:59 G	41250997.14	41250997.25	41250997.42	0.0062	0.0054
Venus	108233-09-07 20:23 G	41252601.20	41252601.35	41252601.54	0.0063	0.0040
Venus	108234-04-21 00:13 G	41252826.29	41252826.51	41252826.73	0.0064	0.0001
Venus	108234-12-02 03:20 G	41253051.48	41253051.64	41253051.82	0.0064	0.0039
Moon	108237-01-12 11:01 G	41253823.83	41253823.96	41253824.12	0.0065	0.0053
Earth	108237-01-12 14:51 G	41253824.00	41253824.12	41253824.25	0.0065	0.0056 *
Earth	108238-01-14 02:23 G	41254190.38	41254190.60	41254190.87	0.0065	0.0022
Moon	108238-01-14 05:59 G	41254190.50	41254190.75	41254191.00	0.0065	0.0018 *
Mercury	108315-07-13 20:08 G	41282494.34	41282494.34	41282494.34	0.0085	0.0084
Mercury	108315-10-09 21:20 G	41282582.31	41282582.39	41282582.47	0.0084	0.0066
Mercury	108316-01-05 22:18 G	41282670.33	41282670.43	41282670.55	0.0084	0.0048
Mercury	108316-04-02 23:30 G	41282758.37	41282758.48	41282758.62	0.0084	0.0030
Mercury	108316-06-30 00:56 G	41282846.41	41282846.54	41282846.67	0.0084	0.0010
Mercury	108316-09-26 02:08 G	41282934.46	41282934.59	41282934.72	0.0084	0.0008
Mercury	108316-12-23 03:20 G	41283022.51	41283022.64	41283022.77	0.0084	0.0026

Mercury	108317-03-21 04:18 G	41283110.58	41283110.68	41283110.80	0.0084	0.0045
Mercury	108317-06-17 05:30 G	41283198.65	41283198.73	41283198.83	0.0084	0.0063
Mercury	108317-09-13 06:42 G	41283286.76	41283286.78	41283286.82	0.0083	0.0080
Mars	108320-05-30 16:47 G	41284276.93	41284277.20	41284277.50	0.0082	0.0044
Venus	108323-10-24 23:15 G	41285519.25	41285519.47	41285519.70	0.0080	0.0008
Venus	108324-06-06 10:18 G	41285744.86	41285744.93	41285745.02	0.0080	0.0074
Moon	108326-07-16 14:51 G	41286514.95	41286515.12	41286515.34	0.0079	0.0051
Earth	108326-07-16 15:35 G	41286514.97	41286515.15	41286515.35	0.0079	0.0054 *
Mercury	108467-05-24 09:49 G	41337961.91	41337961.91	41337961.92	0.0059	0.0059
Mercury	108467-08-20 11:01 G	41338049.86	41338049.96	41338050.07	0.0060	0.0050
Mercury	108467-11-16 11:59 G	41338137.88	41338138.00	41338138.17	0.0060	0.0041
Mercury	108468-02-12 13:39 G	41338225.91	41338226.07	41338226.25	0.0060	0.0031
Mercury	108468-05-10 14:51 G	41338313.95	41338314.12	41338314.32	0.0060	0.0022
Mercury	108468-08-06 16:18 G	41338402.00	41338402.18	41338402.38	0.0060	0.0012
Mercury	108468-11-02 17:59 G	41338490.05	41338490.25	41338490.44	0.0060	0.0002
Mercury	108469-01-29 19:11 G	41338578.11	41338578.30	41338578.50	0.0060	0.0008
Mercury	108469-04-27 20:37 G	41338666.17	41338666.36	41338666.55	0.0060	0.0017
Mercury	108469-07-24 21:35 G	41338754.24	41338754.40	41338754.59	0.0060	0.0027
Mercury	108469-10-20 22:47 G	41338842.32	41338842.45	41338842.63	0.0060	0.0037
Mercury	108470-01-17 00:42 G	41338930.41	41338930.53	41338930.65	0.0060	0.0047
Mercury	108470-04-15 01:39 G	41339018.52	41339018.57	41339018.65	0.0060	0.0057
Venus	108480-12-30 10:18 G	41342930.81	41342930.93	41342931.10	0.0063	0.0047
Venus	108481-08-12 13:54 G	41343155.87	41343156.08	41343156.30	0.0064	0.0008
Venus	108482-03-25 17:01 G	41343381.04	41343381.21	41343381.41	0.0064	0.0032
Moon	108485-01-15 18:42 G	41344408.05	41344408.28	41344408.52	0.0065	0.0023
Earth	108485-01-15 18:56 G	41344408.06	41344408.29	41344408.53	0.0065	0.0026 *
Moon	108486-01-17 04:32 G	41344774.54	41344774.69	41344774.89	0.0065	0.0049
Earth	108486-01-17 06:42 G	41344774.65	41344774.78	41344774.95	0.0065	0.0053 *
Mercury	108563-02-15 06:56 G	41372926.73	41372926.79	41372926.84	0.0084	0.0076
Mercury	108563-05-14 07:54 G	41373014.74	41373014.83	41373014.93	0.0084	0.0058

Mercury	108563-08-10 09:06 G	41373102.77	41373102.88	41373103.01	0.0084	0.0039
Mercury	108563-11-06 10:32 G	41373190.81	41373190.94	41373191.07	0.0084	0.0020
Mercury	108564-02-02 11:44 G	41373278.86	41373278.99	41373279.12	0.0084	0.0002
Mercury	108564-04-30 12:56 G	41373366.91	41373367.04	41373367.17	0.0084	0.0016
Mercury	108564-07-27 14:08 G	41373454.97	41373455.09	41373455.21	0.0084	0.0034
Mercury	108564-10-23 15:06 G	41373543.03	41373543.13	41373543.24	0.0084	0.0052
Mercury	108565-01-19 16:03 G	41373631.12	41373631.17	41373631.26	0.0084	0.0071
Venus	108571-02-15 09:35 G	41375848.70	41375848.90	41375849.12	0.0080	0.0029
Venus	108571-09-28 20:23 G	41376074.21	41376074.35	41376074.54	0.0080	0.0055
Moon	108573-07-17 20:08 G	41376732.11	41376732.34	41376732.60	0.0079	0.0031
Earth	108573-07-17 22:47 G	41376732.23	41376732.45	41376732.70	0.0079	0.0032 *
Mercury	108714-10-01 17:44 G	41428306.24	41428306.24	41428306.27	0.0060	0.0059
Mercury	108714-12-28 19:11 G	41428394.21	41428394.30	41428394.42	0.0060	0.0050
Mercury	108715-03-26 20:08 G	41428482.22	41428482.34	41428482.51	0.0060	0.0041
Mercury	108715-06-22 21:49 G	41428570.26	41428570.41	41428570.59	0.0060	0.0031
Mercury	108715-09-18 23:30 G	41428658.30	41428658.48	41428658.66	0.0060	0.0021
Mercury	108715-12-16 00:42 G	41428746.35	41428746.53	41428746.73	0.0060	0.0012
Mercury	108716-03-13 02:08 G	41428834.40	41428834.59	41428834.79	0.0060	0.0002
Mercury	108716-06-09 03:35 G	41428922.46	41428922.65	41428922.85	0.0060	0.0008
Mercury	108716-09-05 05:01 G	41429010.52	41429010.71	41429010.90	0.0060	0.0017
Mercury	108716-12-02 06:13 G	41429098.59	41429098.76	41429098.94	0.0060	0.0027
Mercury	108717-02-28 07:11 G	41429186.67	41429186.80	41429186.98	0.0060	0.0038
Mercury	108717-05-27 08:23 G	41429274.76	41429274.85	41429275.00	0.0060	0.0048
Mercury	108717-08-23 10:18 G	41429362.87	41429362.93	41429363.00	0.0060	0.0057
Mars	108723-12-20 11:30 G	41431672.70	41431672.98	41431673.28	0.0062	0.0007
Venus	108728-04-25 01:54 G	41433260.46	41433260.58	41433260.76	0.0063	0.0047
Venus	108728-12-06 05:44 G	41433485.53	41433485.74	41433485.96	0.0064	0.0008
Venus	108729-07-19 09:06 G	41433710.70	41433710.88	41433711.07	0.0064	0.0032
Moon	108732-01-20 14:23 G	41434626.07	41434626.10	41434626.19	0.0065	0.0063
Earth	108733-01-21 02:23 G	41434992.36	41434992.60	41434992.86	0.0065	0.0013

Moon	108733-01-21 03:49 G	41434992.43	41434992.66	41434992.92	0.0065	0.0012	*
Mercury	108810-06-24 17:30 G	41463271.18	41463271.23	41463271.31	0.0085	0.0074	
Mercury	108810-09-20 18:42 G	41463359.19	41463359.28	41463359.39	0.0084	0.0056	
Mercury	108810-12-17 20:08 G	41463447.22	41463447.34	41463447.46	0.0084	0.0037	
Mercury	108811-03-15 21:20 G	41463535.26	41463535.39	41463535.52	0.0084	0.0018	
Mercury	108811-06-11 22:32 G	41463623.31	41463623.44	41463623.58	0.0084	0.0002	
Mercury	108811-09-07 23:44 G	41463711.36	41463711.49	41463711.62	0.0084	0.0018	
Mercury	108811-12-05 00:42 G	41463799.42	41463799.53	41463799.66	0.0084	0.0037	
Mercury	108812-03-02 01:54 G	41463887.49	41463887.58	41463887.69	0.0084	0.0055	
Mercury	108812-05-29 03:06 G	41463975.58	41463975.63	41463975.70	0.0084	0.0073	
Venus	108818-06-10 00:56 G	41466178.33	41466178.54	41466178.76	0.0080	0.0026	
Venus	108819-01-21 11:44 G	41466403.85	41466403.99	41466404.17	0.0080	0.0057	
Moon	108821-07-22 14:37 G	41467316.93	41467317.11	41467317.34	0.0079	0.0050	
Earth	108821-07-22 18:56 G	41467317.09	41467317.29	41467317.48	0.0079	0.0053	*
Mercury	108962-02-07 03:06 G	41518650.57	41518650.63	41518650.74	0.0060	0.0054	
Mercury	108962-05-06 04:32 G	41518738.58	41518738.69	41518738.84	0.0060	0.0044	
Mercury	108962-08-02 06:27 G	41518826.61	41518826.77	41518826.93	0.0060	0.0034	
Mercury	108962-10-29 07:25 G	41518914.65	41518914.81	41518915.00	0.0060	0.0025	
Mercury	108963-01-25 09:06 G	41519002.69	41519002.88	41519003.07	0.0060	0.0015	
Mercury	108963-04-23 10:18 G	41519090.74	41519090.93	41519091.13	0.0060	0.0006	
Mercury	108963-07-20 11:44 G	41519178.80	41519178.99	41519179.19	0.0060	0.0005	
Mercury	108963-10-16 13:11 G	41519266.86	41519267.05	41519267.24	0.0060	0.0014	
Mercury	108964-01-12 14:08 G	41519354.93	41519355.09	41519355.29	0.0060	0.0024	
Mercury	108964-04-09 16:03 G	41519443.01	41519443.17	41519443.33	0.0060	0.0034	
Mercury	108964-07-06 17:01 G	41519531.09	41519531.21	41519531.36	0.0060	0.0044	
Mercury	108964-10-02 18:13 G	41519619.19	41519619.26	41519619.37	0.0060	0.0054	
Venus	108975-08-17 20:23 G	41523590.19	41523590.35	41523590.54	0.0063	0.0038	
Venus	108976-03-29 23:59 G	41523815.29	41523815.50	41523815.72	0.0064	0.0002	
Venus	108976-11-10 03:06 G	41524040.48	41524040.63	41524040.82	0.0064	0.0041	
Moon	108980-01-23 22:47 G	41525210.21	41525210.45	41525210.71	0.0065	0.0014	

Earth	108980-01-24 01:39 G	41525210.34	41525210.57	41525210.83	0.0065	0.0016	*
Earth	108981-01-24 13:25 G	41525577.04	41525577.06	41525577.14	0.0065	0.0064	
Moon	108981-01-24 15:35 G	41525577.10	41525577.15	41525577.26	0.0065	0.0063	*

# 110TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 110th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	109057-08-05 04:03 G		41553527.65	41553527.67	41553527.70	0.0085	0.0083	
Mercury	109057-11-01 05:15 G		41553615.64	41553615.72	41553615.81	0.0084	0.0064	
Mercury	109058-01-28 06:42 G		41553703.67	41553703.78	41553703.89	0.0084	0.0046	
Mercury	109058-04-26 07:39 G		41553791.70	41553791.82	41553791.95	0.0084	0.0028	
Mercury	109058-07-23 08:51 G		41553879.74	41553879.87	41553880.01	0.0084	0.0010	
Mercury	109058-10-19 10:03 G		41553967.79	41553967.92	41553968.06	0.0084	0.0010	
Mercury	109059-01-15 11:15 G		41554055.85	41554055.97	41554056.10	0.0084	0.0027	
Mercury	109059-04-13 12:13 G		41554143.91	41554144.01	41554144.13	0.0084	0.0046	
Mercury	109059-07-10 13:25 G		41554231.99	41554232.06	41554232.16	0.0084	0.0064	
Mercury	109059-10-06 14:37 G		41554320.09	41554320.11	41554320.15	0.0084	0.0081	
Venus	109065-10-02 18:27 G		41556508.06	41556508.27	41556508.50	0.0080	0.0013	
Venus	109066-05-16 05:44 G		41556733.64	41556733.74	41556733.86	0.0080	0.0070	
Earth	109068-07-25 13:39 G		41557534.81	41557535.07	41557535.34	0.0079	0.0005	
Moon	109068-07-25 14:51 G		41557534.85	41557535.12	41557535.39	0.0079	0.0009	*
Mercury	109209-03-20 12:42 G		41608906.95	41608907.03	41608907.12	0.0060	0.0053	

Mercury	109209-06-16 13:39 G	41608994.96	41608995.07	41608995.22	0.0060	0.0044
Mercury	109209-09-12 15:20 G	41609082.98	41609083.14	41609083.31	0.0060	0.0034
Mercury	109209-12-09 16:32 G	41609171.02	41609171.19	41609171.38	0.0060	0.0025
Mercury	109210-03-07 17:58 G	41609259.07	41609259.25	41609259.45	0.0060	0.0015
Mercury	109210-06-03 19:25 G	41609347.12	41609347.31	41609347.51	0.0060	0.0005
Mercury	109210-08-30 20:51 G	41609435.18	41609435.37	41609435.57	0.0060	0.0004
Mercury	109210-11-26 22:03 G	41609523.24	41609523.42	41609523.62	0.0060	0.0014
Mercury	109211-02-22 23:15 G	41609611.31	41609611.47	41609611.67	0.0060	0.0024
Mercury	109211-05-22 00:56 G	41609699.38	41609699.54	41609699.71	0.0060	0.0034
Mercury	109211-08-18 02:08 G	41609787.47	41609787.59	41609787.74	0.0060	0.0043
Mercury	109211-11-14 03:20 G	41609875.57	41609875.64	41609875.75	0.0060	0.0053
Mars	109218-08-23 03:20 G	41612349.35	41612349.64	41612349.94	0.0062	0.0005
Venus	109222-04-29 12:13 G	41613694.99	41613695.01	41613695.10	0.0063	0.0062
Venus	109222-12-10 16:03 G	41613919.98	41613920.17	41613920.38	0.0063	0.0023
Venus	109223-07-23 19:25 G	41614145.11	41614145.31	41614145.53	0.0064	0.0017
Venus	109224-03-04 22:32 G	41614370.36	41614370.44	41614370.56	0.0064	0.0056
Earth	109227-01-27 03:34 G	41615428.47	41615428.65	41615428.89	0.0065	0.0036
Moon	109227-01-27 07:10 G	41615428.62	41615428.80	41615429.04	0.0065	0.0038 *
Moon	109228-01-28 14:08 G	41615794.94	41615795.09	41615795.28	0.0065	0.0047
Earth	109228-01-28 16:18 G	41615795.00	41615795.18	41615795.38	0.0065	0.0044 *
Mercury	109304-09-15 15:49 G	41643784.12	41643784.16	41643784.20	0.0085	0.0080
Mercury	109304-12-12 16:46 G	41643872.12	41643872.20	41643872.30	0.0085	0.0062
Mercury	109305-03-10 18:13 G	41643960.15	41643960.26	41643960.38	0.0084	0.0043
Mercury	109305-06-06 19:25 G	41644048.19	41644048.31	41644048.44	0.0084	0.0025
Mercury	109305-09-02 20:37 G	41644136.23	41644136.36	41644136.50	0.0084	0.0006
Mercury	109305-11-29 21:49 G	41644224.28	41644224.41	41644224.54	0.0084	0.0012
Mercury	109306-02-25 23:01 G	41644312.34	41644312.46	41644312.58	0.0084	0.0030
Mercury	109306-05-25 00:13 G	41644400.40	41644400.51	41644400.62	0.0084	0.0048
Mercury	109306-08-21 01:25 G	41644488.48	41644488.56	41644488.64	0.0084	0.0066
Venus	109312-06-14 05:58 G	41646612.61	41646612.75	41646612.90	0.0081	0.0061



Venus	109313-01-25 17:01 G	41646838.01	41646838.21	41646838.44	0.0080	0.0023
Earth	109315-07-29 15:34 G	41647752.92	41647753.15	41647753.42	0.0079	0.0020
Moon	109315-07-29 16:46 G	41647752.97	41647753.20	41647753.46	0.0079	0.0022 *
Mercury	109456-02-02 20:51 G	41699075.35	41699075.37	41699075.45	0.0060	0.0058
Mercury	109456-04-30 22:32 G	41699163.34	41699163.44	41699163.57	0.0060	0.0048
Mercury	109456-07-28 00:13 G	41699251.36	41699251.51	41699251.66	0.0060	0.0038
Mercury	109456-10-24 01:10 G	41699339.40	41699339.55	41699339.74	0.0060	0.0029
Mercury	109457-01-20 02:51 G	41699427.44	41699427.62	41699427.81	0.0060	0.0019
Mercury	109457-04-18 04:03 G	41699515.49	41699515.67	41699515.88	0.0060	0.0010
Mercury	109457-07-15 05:44 G	41699603.54	41699603.74	41699603.94	0.0060	0.0000
Mercury	109457-10-11 06:56 G	41699691.60	41699691.79	41699691.99	0.0060	0.0010
Mercury	109458-01-07 08:08 G	41699779.67	41699779.84	41699780.04	0.0060	0.0020
Mercury	109458-04-05 09:34 G	41699867.74	41699867.90	41699868.08	0.0060	0.0029
Mercury	109458-07-02 10:46 G	41699955.82	41699955.95	41699956.12	0.0060	0.0039
Mercury	109458-09-28 11:58 G	41700043.91	41700044.00	41700044.14	0.0060	0.0049
Mercury	109458-12-25 13:39 G	41700132.04	41700132.07	41700132.13	0.0060	0.0059
Venus	109469-08-22 10:32 G	41704024.79	41704024.94	41704025.13	0.0063	0.0039
Venus	109470-04-04 14:08 G	41704249.88	41704250.09	41704250.31	0.0064	0.0002
Venus	109470-11-15 17:15 G	41704475.07	41704475.22	41704475.41	0.0064	0.0040
Earth	109474-01-30 10:03 G	41705646.75	41705646.92	41705647.11	0.0065	0.0046
Moon	109474-01-30 13:10 G	41705646.89	41705647.05	41705647.27	0.0065	0.0043 *
Moon	109475-01-31 19:54 G	41706013.13	41706013.33	41706013.57	0.0065	0.0030
Earth	109475-01-31 22:03 G	41706013.23	41706013.42	41706013.67	0.0065	0.0034 *
Mercury	109551-10-28 03:34 G	41734040.60	41734040.65	41734040.73	0.0085	0.0073
Mercury	109552-01-24 05:01 G	41734128.62	41734128.71	41734128.82	0.0084	0.0054
Mercury	109552-04-21 06:13 G	41734216.65	41734216.76	41734216.89	0.0084	0.0036
Mercury	109552-07-18 07:25 G	41734304.69	41734304.81	41734304.95	0.0084	0.0018
Mercury	109552-10-14 08:51 G	41734392.74	41734392.87	41734393.00	0.0084	0.0001
Mercury	109553-01-10 10:03 G	41734480.79	41734480.92	41734481.05	0.0084	0.0019
Mercury	109553-04-08 11:01 G	41734568.85	41734568.96	41734569.09	0.0084	0.0038

Mercury	109553-07-05 11:58 G	41734656.92	41734657.00	41734657.12	0.0084	0.0056
Mercury	109553-10-01 13:10 G	41734745.00	41734745.05	41734745.13	0.0084	0.0074
Venus	109559-10-08 05:58 G	41736942.54	41736942.75	41736942.98	0.0081	0.0018
Venus	109560-05-20 17:01 G	41737168.10	41737168.21	41737168.36	0.0080	0.0065
Earth	109562-08-01 20:37 G	41737971.14	41737971.36	41737971.60	0.0079	0.0035
Moon	109562-08-01 21:34 G	41737971.19	41737971.40	41737971.66	0.0079	0.0032 *
Mercury	109702-12-18 06:56 G	41789243.76	41789243.79	41789243.84	0.0060	0.0058
Mercury	109703-03-16 07:54 G	41789331.74	41789331.83	41789331.97	0.0060	0.0049
Mercury	109703-06-12 09:34 G	41789419.76	41789419.90	41789420.06	0.0060	0.0039
Mercury	109703-09-08 10:46 G	41789507.80	41789507.95	41789508.14	0.0060	0.0030
Mercury	109703-12-05 12:27 G	41789595.84	41789596.02	41789596.21	0.0060	0.0020
Mercury	109704-03-02 13:39 G	41789683.89	41789684.07	41789684.27	0.0060	0.0011
Mercury	109704-05-29 15:20 G	41789771.94	41789772.14	41789772.33	0.0060	0.0001
Mercury	109704-08-25 16:32 G	41789860.00	41789860.19	41789860.39	0.0060	0.0009
Mercury	109704-11-21 17:58 G	41789948.06	41789948.25	41789948.44	0.0060	0.0018
Mercury	109705-02-17 19:10 G	41790036.14	41790036.30	41790036.48	0.0060	0.0028
Mercury	109705-05-16 20:22 G	41790124.21	41790124.35	41790124.52	0.0060	0.0038
Mercury	109705-08-12 22:03 G	41790212.31	41790212.42	41790212.54	0.0060	0.0048
Mercury	109705-11-08 23:15 G	41790300.43	41790300.47	41790300.54	0.0060	0.0058
Mars	109713-04-27 13:39 G	41793026.88	41793027.07	41793027.30	0.0062	0.0044
Venus	109716-05-04 06:27 G	41794129.66	41794129.77	41794129.93	0.0063	0.0050
Venus	109716-12-15 10:18 G	41794354.72	41794354.93	41794355.14	0.0064	0.0011
Venus	109717-07-28 13:39 G	41794579.87	41794580.07	41794580.26	0.0064	0.0028
Earth	109721-02-02 17:44 G	41795865.10	41795865.24	41795865.43	0.0065	0.0050
Moon	109721-02-02 21:34 G	41795865.23	41795865.40	41795865.57	0.0065	0.0048 *
Moon	109722-02-04 04:32 G	41796231.47	41796231.69	41796231.92	0.0065	0.0028
Earth	109722-02-04 06:13 G	41796231.55	41796231.76	41796232.01	0.0065	0.0030 *
Mercury	109798-09-10 15:34 G	41824209.10	41824209.15	41824209.23	0.0085	0.0074
Mercury	109798-12-07 17:01 G	41824297.11	41824297.21	41824297.31	0.0085	0.0055
Mercury	109799-03-05 18:13 G	41824385.15	41824385.26	41824385.38	0.0084	0.0036

Mercury	109799-06-01 19:25 G	41824473.19	41824473.31	41824473.44	0.0084	0.0018
Mercury	109799-08-28 20:37 G	41824561.23	41824561.36	41824561.50	0.0084	0.0003
Mercury	109799-11-24 21:49 G	41824649.29	41824649.41	41824649.54	0.0084	0.0018
Mercury	109800-02-20 23:01 G	41824737.35	41824737.46	41824737.58	0.0084	0.0036
Mercury	109800-05-19 23:58 G	41824825.41	41824825.50	41824825.61	0.0084	0.0055
Mercury	109800-08-16 01:25 G	41824913.50	41824913.56	41824913.63	0.0084	0.0072
Mars	109804-06-08 07:10 G	41826305.55	41826305.80	41826306.11	0.0082	0.0046
Venus	109806-06-19 23:01 G	41827047.28	41827047.46	41827047.67	0.0081	0.0040
Venus	109807-01-31 10:18 G	41827272.76	41827272.93	41827273.13	0.0080	0.0044
Earth	109809-08-05 07:39 G	41828189.60	41828189.82	41828190.08	0.0079	0.0031
Moon	109809-08-05 09:34 G	41828189.68	41828189.90	41828190.16	0.0079	0.0029 *
Mercury	109949-11-01 17:44 G	41879412.16	41879412.24	41879412.34	0.0060	0.0053
Mercury	109950-01-28 18:56 G	41879500.17	41879500.29	41879500.44	0.0060	0.0044
Mercury	109950-04-26 20:37 G	41879588.20	41879588.36	41879588.52	0.0060	0.0034
Mercury	109950-07-23 21:49 G	41879676.24	41879676.41	41879676.60	0.0060	0.0025
Mercury	109950-10-19 23:15 G	41879764.29	41879764.47	41879764.67	0.0060	0.0015
Mercury	109951-01-16 00:42 G	41879852.34	41879852.53	41879852.73	0.0060	0.0006
Mercury	109951-04-14 02:08 G	41879940.40	41879940.59	41879940.79	0.0060	0.0004
Mercury	109951-07-11 03:20 G	41880028.46	41880028.64	41880028.84	0.0060	0.0014
Mercury	109951-10-07 04:46 G	41880116.52	41880116.70	41880116.89	0.0060	0.0023
Mercury	109952-01-03 05:58 G	41880204.60	41880204.75	41880204.93	0.0060	0.0033
Mercury	109952-03-31 07:10 G	41880292.68	41880292.80	41880292.96	0.0060	0.0043
Mercury	109952-06-27 08:51 G	41880380.78	41880380.87	41880380.97	0.0060	0.0053
Mars	109959-09-19 06:27 G	41883020.50	41883020.77	41883021.08	0.0062	0.0012
Venus	109963-01-15 04:46 G	41884234.60	41884234.70	41884234.85	0.0063	0.0052
Venus	109963-08-28 08:37 G	41884459.65	41884459.86	41884460.07	0.0063	0.0013
Venus	109964-04-09 11:58 G	41884684.80	41884685.00	41884685.19	0.0064	0.0026
Earth	109968-02-07 06:27 G	41886083.61	41886083.77	41886083.99	0.0065	0.0043
Moon	109968-02-07 09:06 G	41886083.72	41886083.88	41886084.09	0.0065	0.0046 *
Moon	109969-02-07 17:58 G	41886450.07	41886450.25	41886450.47	0.0065	0.0040

Earth 109969-02-07 19:25 G 41886450.10 41886450.31 41886450.53 0.0065 0.0037 \*

# 111TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 111th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	110045-07-26 04:18	G	41914377.61	41914377.68	41914377.76	0.0085	0.0069	
Mercury	110045-10-22 05:30	G	41914465.63	41914465.73	41914465.85	0.0085	0.0051	
Mercury	110046-01-18 06:56	G	41914553.67	41914553.79	41914553.91	0.0084	0.0032	
Mercury	110046-04-16 08:08	G	41914641.71	41914641.84	41914641.97	0.0084	0.0014	
Mercury	110046-07-13 09:20	G	41914729.76	41914729.89	41914730.02	0.0084	0.0005	
Mercury	110046-10-09 10:32	G	41914817.81	41914817.94	41914818.07	0.0084	0.0023	
Mercury	110047-01-05 11:30	G	41914905.87	41914905.98	41914906.10	0.0084	0.0041	
Mercury	110047-04-03 12:42	G	41914993.95	41914994.03	41914994.13	0.0084	0.0059	
Mercury	110047-06-30 13:54	G	41915082.04	41915082.08	41915082.14	0.0084	0.0077	
Venus	110053-02-28 18:42	G	41917152.11	41917152.28	41917152.45	0.0081	0.0052	
Venus	110053-10-12 05:30	G	41917377.54	41917377.73	41917377.96	0.0080	0.0032	
Earth	110056-08-07 22:18	G	41918408.19	41918408.43	41918408.71	0.0079	0.0017	
Moon	110056-08-08 01:39	G	41918408.33	41918408.57	41918408.83	0.0079	0.0020	*
Mercury	110196-06-19 03:49	G	41969492.59	41969492.66	41969492.76	0.0060	0.0054	
Mercury	110196-09-15 05:01	G	41969580.60	41969580.71	41969580.86	0.0060	0.0045	
Mercury	110196-12-12 06:42	G	41969668.63	41969668.78	41969668.95	0.0060	0.0035	
Mercury	110197-03-10 07:54	G	41969756.67	41969756.83	41969757.02	0.0060	0.0026	

Mercury	110197-06-06 09:20 G	41969844.71	41969844.89	41969845.09	0.0060	0.0016
Mercury	110197-09-02 11:01 G	41969932.76	41969932.96	41969933.16	0.0060	0.0006
Mercury	110197-11-29 12:13 G	41970020.82	41970021.01	41970021.21	0.0060	0.0004
Mercury	110198-02-25 13:39 G	41970108.88	41970109.07	41970109.27	0.0060	0.0013
Mercury	110198-05-24 14:51 G	41970196.95	41970197.12	41970197.31	0.0060	0.0023
Mercury	110198-08-20 16:18 G	41970285.03	41970285.18	41970285.36	0.0060	0.0032
Mercury	110198-11-16 17:30 G	41970373.11	41970373.23	41970373.39	0.0060	0.0042
Mercury	110199-02-12 18:42 G	41970461.21	41970461.28	41970461.41	0.0060	0.0052
Mars	110206-02-10 05:15 G	41973014.61	41973014.72	41973014.88	0.0062	0.0055
Venus	110209-09-27 05:01 G	41974339.59	41974339.71	41974339.88	0.0063	0.0047
Venus	110210-05-10 08:51 G	41974564.66	41974564.87	41974565.09	0.0063	0.0008
Venus	110210-12-21 12:13 G	41974789.82	41974790.01	41974790.20	0.0064	0.0031
Earth	110215-02-10 23:15 G	41976302.24	41976302.47	41976302.71	0.0065	0.0027
Moon	110215-02-10 22:32 G	41976302.24	41976302.44	41976302.71	0.0065	0.0031 *
Earth	110216-02-12 11:15 G	41976668.84	41976668.97	41976669.13	0.0066	0.0054
Moon	110216-02-12 13:10 G	41976668.94	41976669.05	41976669.18	0.0066	0.0057 *
Mercury	110292-03-13 16:46 G	42004458.15	42004458.20	42004458.29	0.0085	0.0071
Mercury	110292-06-09 18:27 G	42004546.16	42004546.27	42004546.37	0.0085	0.0052
Mercury	110292-09-05 19:25 G	42004634.20	42004634.31	42004634.44	0.0084	0.0034
Mercury	110292-12-02 20:37 G	42004722.24	42004722.36	42004722.50	0.0084	0.0016
Mercury	110293-02-28 22:03 G	42004810.28	42004810.42	42004810.55	0.0084	0.0004
Mercury	110293-05-27 23:01 G	42004898.34	42004898.46	42004898.59	0.0084	0.0021
Mercury	110293-08-24 00:13 G	42004986.40	42004986.51	42004986.63	0.0084	0.0039
Mercury	110293-11-20 01:25 G	42005074.47	42005074.56	42005074.66	0.0084	0.0057
Mercury	110294-02-16 02:22 G	42005162.56	42005162.60	42005162.67	0.0084	0.0075
Venus	110299-11-11 18:27 G	42007257.09	42007257.27	42007257.47	0.0081	0.0043
Venus	110300-06-25 05:44 G	42007482.56	42007482.74	42007482.95	0.0080	0.0041
Earth	110303-08-13 20:51 G	42008627.12	42008627.37	42008627.63	0.0079	0.0022
Moon	110303-08-14 00:13 G	42008627.26	42008627.51	42008627.78	0.0079	0.0018 *
Mercury	110442-11-09 13:54 G	42059485.06	42059485.08	42059485.16	0.0060	0.0058

Mercury	110443-02-05 15:49 G	42059573.05	42059573.16	42059573.29	0.0060	0.0048
Mercury	110443-05-04 16:46 G	42059661.08	42059661.20	42059661.38	0.0060	0.0039
Mercury	110443-07-31 18:27 G	42059749.11	42059749.27	42059749.46	0.0060	0.0029
Mercury	110443-10-27 19:54 G	42059837.15	42059837.33	42059837.53	0.0060	0.0020
Mercury	110444-01-23 21:20 G	42059925.20	42059925.39	42059925.59	0.0060	0.0010
Mercury	110444-04-20 22:46 G	42060013.26	42060013.45	42060013.65	0.0060	0.0002
Mercury	110444-07-18 00:13 G	42060101.32	42060101.51	42060101.71	0.0060	0.0009
Mercury	110444-10-14 01:25 G	42060189.38	42060189.56	42060189.76	0.0060	0.0019
Mercury	110445-01-10 02:37 G	42060277.46	42060277.61	42060277.80	0.0060	0.0029
Mercury	110445-04-08 04:18 G	42060365.54	42060365.68	42060365.84	0.0060	0.0038
Mercury	110445-07-05 05:15 G	42060453.63	42060453.72	42060453.86	0.0060	0.0049
Mercury	110445-10-01 06:27 G	42060541.75	42060541.77	42060541.85	0.0060	0.0059
Venus	110456-06-08 08:08 G	42064444.67	42064444.84	42064445.05	0.0063	0.0032
Venus	110457-01-19 11:44 G	42064669.78	42064669.99	42064670.21	0.0064	0.0008
Venus	110457-09-01 14:37 G	42064894.99	42064895.11	42064895.28	0.0064	0.0047
Moon	110462-02-13 17:15 G	42066520.96	42066521.22	42066521.48	0.0065	0.0001
Earth	110462-02-13 20:22 G	42066521.10	42066521.35	42066521.61	0.0065	0.0004 *
Mercury	110538-08-04 05:15 G	42094450.70	42094450.72	42094450.78	0.0085	0.0081
Mercury	110538-10-31 06:56 G	42094538.70	42094538.79	42094538.88	0.0085	0.0062
Mercury	110539-01-27 07:54 G	42094626.73	42094626.83	42094626.95	0.0085	0.0044
Mercury	110539-04-25 09:20 G	42094714.77	42094714.89	42094715.02	0.0084	0.0025
Mercury	110539-07-22 10:32 G	42094802.81	42094802.94	42094803.07	0.0084	0.0007
Mercury	110539-10-18 11:44 G	42094890.86	42094890.99	42094891.12	0.0084	0.0011
Mercury	110540-01-14 12:56 G	42094978.92	42094979.04	42094979.16	0.0084	0.0029
Mercury	110540-04-11 13:54 G	42095066.98	42095067.08	42095067.20	0.0084	0.0047
Mercury	110540-07-08 15:06 G	42095155.06	42095155.13	42095155.22	0.0084	0.0065
Mercury	110540-10-04 16:03 G	42095243.17	42095243.17	42095243.21	0.0084	0.0083
Venus	110546-07-24 22:32 G	42097362.22	42097362.44	42097362.66	0.0081	0.0017
Venus	110547-03-07 09:49 G	42097587.78	42097587.91	42097588.04	0.0080	0.0066
Moon	110549-08-14 17:01 G	42098479.11	42098479.21	42098479.37	0.0079	0.0068

Earth	110549-08-14 19:54 G	42098479.22	42098479.33	42098479.47	0.0079	0.0069	*
Earth	110550-08-17 00:42 G	42098846.50	42098846.53	42098846.60	0.0078	0.0077	
Moon	110550-08-17 02:08 G	42098846.53	42098846.59	42098846.70	0.0078	0.0075	*
Mercury	110689-04-01 01:25 G	42149477.53	42149477.56	42149477.62	0.0060	0.0058	
Mercury	110689-06-28 02:37 G	42149565.52	42149565.61	42149565.75	0.0060	0.0049	
Mercury	110689-09-24 04:18 G	42149653.54	42149653.68	42149653.84	0.0060	0.0039	
Mercury	110689-12-21 05:30 G	42149741.57	42149741.73	42149741.92	0.0060	0.0030	
Mercury	110690-03-19 06:56 G	42149829.62	42149829.79	42149829.99	0.0060	0.0020	
Mercury	110690-06-15 08:22 G	42149917.67	42149917.85	42149918.05	0.0060	0.0011	
Mercury	110690-09-11 10:03 G	42150005.72	42150005.92	42150006.11	0.0060	0.0001	
Mercury	110690-12-08 11:15 G	42150093.78	42150093.97	42150094.17	0.0060	0.0009	
Mercury	110691-03-06 12:42 G	42150181.84	42150182.03	42150182.22	0.0060	0.0018	
Mercury	110691-06-02 13:54 G	42150269.92	42150270.08	42150270.26	0.0060	0.0028	
Mercury	110691-08-29 15:06 G	42150358.00	42150358.13	42150358.30	0.0060	0.0038	
Mercury	110691-11-25 16:46 G	42150446.09	42150446.20	42150446.33	0.0060	0.0048	
Mercury	110692-02-21 17:44 G	42150534.21	42150534.24	42150534.32	0.0060	0.0058	
Venus	110702-07-10 09:20 G	42154324.78	42154324.89	42154325.06	0.0063	0.0050	
Venus	110703-02-20 13:10 G	42154549.84	42154550.05	42154550.27	0.0063	0.0011	
Venus	110703-10-03 16:18 G	42154774.99	42154775.18	42154775.38	0.0064	0.0028	
Moon	110708-02-18 06:42 G	42156373.63	42156373.78	42156374.00	0.0065	0.0044	
Earth	110708-02-18 07:25 G	42156373.64	42156373.81	42156374.05	0.0065	0.0041	*
Moon	110709-02-18 19:10 G	42156740.12	42156740.30	42156740.51	0.0066	0.0044	
Earth	110709-02-18 20:37 G	42156740.17	42156740.36	42156740.57	0.0066	0.0041	*
Mercury	110784-12-24 19:10 G	42184443.27	42184443.30	42184443.35	0.0085	0.0080	
Mercury	110785-03-22 20:37 G	42184531.27	42184531.36	42184531.45	0.0085	0.0061	
Mercury	110785-06-18 21:49 G	42184619.30	42184619.41	42184619.52	0.0085	0.0043	
Mercury	110785-09-14 23:01 G	42184707.33	42184707.46	42184707.59	0.0084	0.0025	
Mercury	110785-12-12 00:13 G	42184795.38	42184795.51	42184795.64	0.0084	0.0006	
Mercury	110786-03-10 01:25 G	42184883.43	42184883.56	42184883.69	0.0084	0.0012	
Mercury	110786-06-06 02:22 G	42184971.49	42184971.60	42184971.73	0.0084	0.0030	

Mercury	110786-09-02 03:34 G	42185059.55	42185059.65	42185059.77	0.0084	0.0048
Mercury	110786-11-29 04:32 G	42185147.63	42185147.69	42185147.79	0.0084	0.0066
Mercury	110787-02-25 05:58 G	42185235.75	42185235.75	42185235.77	0.0084	0.0083
Venus	110792-08-23 18:56 G	42187242.14	42187242.29	42187242.47	0.0081	0.0055
Venus	110793-04-06 06:13 G	42187467.56	42187467.76	42187467.99	0.0081	0.0029
Moon	110796-08-19 03:20 G	42188698.38	42188698.64	42188698.91	0.0079	0.0006
Earth	110796-08-19 06:42 G	42188698.53	42188698.78	42188699.05	0.0079	0.0009 *
Mercury	110935-08-22 13:39 G	42239470.01	42239470.07	42239470.19	0.0060	0.0053
Mercury	110935-11-18 15:20 G	42239558.02	42239558.14	42239558.29	0.0060	0.0043
Mercury	110936-02-14 16:32 G	42239646.05	42239646.19	42239646.38	0.0060	0.0034
Mercury	110936-05-12 18:13 G	42239734.09	42239734.26	42239734.45	0.0060	0.0024
Mercury	110936-08-08 19:25 G	42239822.14	42239822.31	42239822.52	0.0060	0.0015
Mercury	110936-11-04 21:06 G	42239910.19	42239910.38	42239910.58	0.0060	0.0005
Mercury	110937-01-31 22:32 G	42239998.24	42239998.44	42239998.64	0.0060	0.0005
Mercury	110937-04-29 23:44 G	42240086.31	42240086.49	42240086.69	0.0060	0.0014
Mercury	110937-07-27 00:56 G	42240174.38	42240174.54	42240174.74	0.0060	0.0024
Mercury	110937-10-23 02:37 G	42240262.45	42240262.61	42240262.78	0.0060	0.0034
Mercury	110938-01-19 03:49 G	42240350.54	42240350.66	42240350.81	0.0060	0.0043
Mercury	110938-04-17 04:46 G	42240438.64	42240438.70	42240438.82	0.0060	0.0054
Venus	110948-08-08 13:10 G	42244205.00	42244205.05	42244205.17	0.0063	0.0059
Venus	110949-03-21 16:46 G	42244430.01	42244430.20	42244430.42	0.0063	0.0020
Venus	110949-11-01 20:08 G	42244655.15	42244655.34	42244655.56	0.0064	0.0019
Venus	110950-06-14 23:01 G	42244880.40	42244880.46	42244880.58	0.0064	0.0058
Moon	110955-02-21 09:34 G	42246592.65	42246592.90	42246593.14	0.0065	0.0012
Earth	110955-02-21 11:58 G	42246592.76	42246593.00	42246593.26	0.0065	0.0009 *

# 112TH MILLENNIUM CE



**This is a list of transits visible from Pluto in the 112th millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	111031-05-17 09:34	G	42274435.84	42274435.90	42274435.98	0.0085	0.0072	
Mercury	111031-08-13 11:01	G	42274523.86	42274523.96	42274524.06	0.0085	0.0053	
Mercury	111031-11-09 12:13	G	42274611.89	42274612.01	42274612.13	0.0085	0.0035	
Mercury	111032-02-05 13:25	G	42274699.93	42274700.06	42274700.19	0.0084	0.0017	
Mercury	111032-05-03 14:37	G	42274787.98	42274788.11	42274788.24	0.0084	0.0002	
Mercury	111032-07-30 15:49	G	42274876.03	42274876.16	42274876.29	0.0084	0.0020	
Mercury	111032-10-26 17:01	G	42274964.09	42274964.21	42274964.33	0.0084	0.0037	
Mercury	111033-01-22 18:13	G	42275052.16	42275052.26	42275052.36	0.0084	0.0055	
Mercury	111033-04-20 19:10	G	42275140.25	42275140.30	42275140.37	0.0084	0.0073	
Venus	111038-09-23 18:56	G	42277122.27	42277122.29	42277122.32	0.0081	0.0080	
Venus	111039-05-07 06:27	G	42277347.55	42277347.77	42277348.00	0.0081	0.0004	
Moon	111042-08-22 15:49	G	42278550.99	42278551.16	42278551.38	0.0079	0.0050	
Earth	111042-08-22 16:32	G	42278551.00	42278551.19	42278551.42	0.0079	0.0046	*
Mercury	111181-10-16 01:25	G	42329374.50	42329374.56	42329374.64	0.0060	0.0055	
Mercury	111182-01-12 02:37	G	42329462.50	42329462.61	42329462.75	0.0060	0.0046	
Mercury	111182-04-10 03:49	G	42329550.53	42329550.66	42329550.84	0.0060	0.0037	
Mercury	111182-07-07 05:30	G	42329638.56	42329638.73	42329638.92	0.0060	0.0027	
Mercury	111182-10-03 07:10	G	42329726.61	42329726.80	42329726.99	0.0060	0.0017	
Mercury	111182-12-30 08:22	G	42329814.66	42329814.85	42329815.05	0.0060	0.0008	
Mercury	111183-03-28 09:49	G	42329902.72	42329902.91	42329903.11	0.0060	0.0002	
Mercury	111183-06-24 11:15	G	42329990.78	42329990.97	42329991.17	0.0060	0.0011	
Mercury	111183-09-20 12:27	G	42330078.85	42330079.02	42330079.21	0.0060	0.0021	

Mercury	111183-12-17 14:08 G	42330166.92	42330167.09	42330167.26	0.0060	0.0031
Mercury	111184-03-14 15:06 G	42330255.00	42330255.13	42330255.29	0.0060	0.0041
Mercury	111184-06-10 16:18 G	42330343.10	42330343.18	42330343.31	0.0060	0.0051
Mercury	111184-09-06 18:13 G	42330431.24	42330431.26	42330431.29	0.0060	0.0060
Mars	111193-08-03 02:08 G	42333683.57	42333683.59	42333683.69	0.0063	0.0062
Venus	111195-04-21 20:51 G	42334310.19	42334310.37	42334310.58	0.0063	0.0028
Venus	111195-12-03 00:27 G	42334535.32	42334535.52	42334535.74	0.0064	0.0011
Venus	111196-07-15 03:34 G	42334760.53	42334760.65	42334760.80	0.0064	0.0050
Earth	111201-02-24 04:32 G	42336445.46	42336445.69	42336445.94	0.0065	0.0021
Moon	111201-02-24 07:10 G	42336445.57	42336445.80	42336446.05	0.0065	0.0018 *
Moon	111202-02-25 13:54 G	42336811.97	42336812.08	42336812.21	0.0066	0.0058
Earth	111202-02-25 17:01 G	42336812.14	42336812.21	42336812.32	0.0066	0.0061 *
Mercury	111277-07-09 23:30 G	42364340.43	42364340.48	42364340.54	0.0085	0.0076
Mercury	111277-10-06 00:42 G	42364428.44	42364428.53	42364428.63	0.0085	0.0058
Mercury	111278-01-02 01:54 G	42364516.47	42364516.58	42364516.70	0.0085	0.0040
Mercury	111278-03-31 03:06 G	42364604.51	42364604.63	42364604.76	0.0084	0.0022
Mercury	111278-06-27 04:18 G	42364692.55	42364692.68	42364692.82	0.0084	0.0005
Mercury	111278-09-23 05:30 G	42364780.61	42364780.73	42364780.87	0.0084	0.0015
Mercury	111278-12-20 06:42 G	42364868.66	42364868.78	42364868.91	0.0084	0.0033
Mercury	111279-03-18 07:39 G	42364956.73	42364956.82	42364956.94	0.0084	0.0051
Mercury	111279-06-14 09:06 G	42365044.81	42365044.88	42365044.96	0.0084	0.0068
Venus	111285-06-05 08:37 G	42367227.65	42367227.86	42367228.09	0.0081	0.0012
Venus	111286-01-16 19:39 G	42367453.24	42367453.32	42367453.44	0.0080	0.0072
Moon	111289-08-26 08:22 G	42368770.71	42368770.85	42368771.03	0.0079	0.0062
Earth	111289-08-26 11:15 G	42368770.82	42368770.97	42368771.18	0.0079	0.0058 *
Mercury	111427-12-10 13:25 G	42419279.00	42419279.06	42419279.17	0.0060	0.0054
Mercury	111428-03-07 15:06 G	42419367.01	42419367.13	42419367.27	0.0060	0.0044
Mercury	111428-06-03 16:18 G	42419455.04	42419455.18	42419455.36	0.0060	0.0035
Mercury	111428-08-30 17:58 G	42419543.08	42419543.25	42419543.43	0.0060	0.0025
Mercury	111428-11-26 19:10 G	42419631.12	42419631.30	42419631.50	0.0060	0.0016

Mercury	111429-02-22 20:51 G	42419719.17	42419719.37	42419719.57	0.0060	0.0006
Mercury	111429-05-21 22:18 G	42419807.23	42419807.43	42419807.63	0.0060	0.0004
Mercury	111429-08-17 23:30 G	42419895.29	42419895.48	42419895.68	0.0060	0.0013
Mercury	111429-11-14 00:42 G	42419983.36	42419983.53	42419983.73	0.0060	0.0023
Mercury	111430-02-10 02:22 G	42420071.44	42420071.60	42420071.77	0.0060	0.0032
Mercury	111430-05-09 03:20 G	42420159.52	42420159.64	42420159.80	0.0060	0.0043
Mercury	111430-08-05 04:32 G	42420247.62	42420247.69	42420247.82	0.0060	0.0053
Venus	111441-05-22 03:06 G	42424190.45	42424190.63	42424190.84	0.0063	0.0028
Venus	111442-01-02 06:42 G	42424415.58	42424415.78	42424416.00	0.0064	0.0011
Venus	111442-08-15 09:49 G	42424640.80	42424640.91	42424641.06	0.0064	0.0050
Earth	111447-02-28 00:56 G	42426298.36	42426298.54	42426298.76	0.0065	0.0041
Moon	111447-02-28 03:20 G	42426298.44	42426298.64	42426298.86	0.0065	0.0038 *
Moon	111448-02-29 13:10 G	42426664.86	42426665.05	42426665.26	0.0066	0.0039
Earth	111448-02-29 13:54 G	42426664.89	42426665.08	42426665.29	0.0066	0.0041 *
Mercury	111523-09-04 13:54 G	42454245.03	42454245.08	42454245.15	0.0085	0.0075
Mercury	111523-12-01 15:06 G	42454333.04	42454333.13	42454333.24	0.0085	0.0057
Mercury	111524-02-27 16:18 G	42454421.08	42454421.18	42454421.31	0.0085	0.0039
Mercury	111524-05-25 17:44 G	42454509.11	42454509.24	42454509.37	0.0084	0.0020
Mercury	111524-08-21 18:56 G	42454597.16	42454597.29	42454597.42	0.0084	0.0002
Mercury	111524-11-17 20:08 G	42454685.21	42454685.34	42454685.47	0.0084	0.0016
Mercury	111525-02-13 21:06 G	42454773.27	42454773.38	42454773.51	0.0084	0.0034
Mercury	111525-05-12 22:32 G	42454861.34	42454861.44	42454861.54	0.0084	0.0051
Mercury	111525-08-08 23:30 G	42454949.42	42454949.48	42454949.56	0.0084	0.0069
Venus	111531-07-07 12:56 G	42457107.82	42457108.04	42457108.26	0.0081	0.0016
Venus	111532-02-17 23:44 G	42457333.39	42457333.49	42457333.64	0.0080	0.0067
Earth	111535-08-31 05:01 G	42458623.48	42458623.71	42458623.98	0.0079	0.0025
Moon	111535-08-31 07:10 G	42458623.58	42458623.80	42458624.05	0.0079	0.0029 *
Mercury	111674-02-02 02:08 G	42509183.50	42509183.59	42509183.71	0.0060	0.0051
Mercury	111674-05-01 03:20 G	42509271.52	42509271.64	42509271.80	0.0060	0.0042
Mercury	111674-07-28 05:15 G	42509359.55	42509359.72	42509359.88	0.0060	0.0032

Mercury	111674-10-24 06:13 G	42509447.59	42509447.76	42509447.96	0.0060	0.0023
Mercury	111675-01-20 07:54 G	42509535.64	42509535.83	42509536.03	0.0060	0.0013
Mercury	111675-04-18 09:20 G	42509623.69	42509623.89	42509624.09	0.0060	0.0004
Mercury	111675-07-15 10:32 G	42509711.75	42509711.94	42509712.15	0.0060	0.0006
Mercury	111675-10-11 11:58 G	42509799.82	42509800.00	42509800.20	0.0060	0.0015
Mercury	111676-01-07 13:10 G	42509887.89	42509888.05	42509888.24	0.0060	0.0025
Mercury	111676-04-04 14:51 G	42509975.96	42509976.12	42509976.28	0.0060	0.0035
Mercury	111676-07-01 16:03 G	42510064.05	42510064.17	42510064.31	0.0060	0.0044
Mercury	111676-09-27 17:01 G	42510152.16	42510152.21	42510152.33	0.0060	0.0055
Venus	111687-06-21 09:49 G	42514070.72	42514070.91	42514071.11	0.0063	0.0027
Venus	111688-02-01 12:56 G	42514295.84	42514296.04	42514296.26	0.0064	0.0012
Venus	111688-09-13 16:18 G	42514521.06	42514521.18	42514521.32	0.0064	0.0050
Moon	111693-03-01 18:13 G	42516151.17	42516151.26	42516151.41	0.0065	0.0058
Earth	111693-03-01 21:20 G	42516151.31	42516151.39	42516151.51	0.0065	0.0060 *
Earth	111694-03-03 10:03 G	42516517.69	42516517.92	42516518.17	0.0066	0.0022
Moon	111694-03-03 13:39 G	42516517.83	42516518.07	42516518.31	0.0066	0.0020 *
Mercury	111769-10-28 04:46 G	42544149.63	42544149.70	42544149.77	0.0085	0.0071
Mercury	111770-01-24 05:58 G	42544237.65	42544237.75	42544237.86	0.0085	0.0053
Mercury	111770-04-22 07:10 G	42544325.68	42544325.80	42544325.93	0.0085	0.0035
Mercury	111770-07-19 08:22 G	42544413.73	42544413.85	42544413.98	0.0084	0.0017
Mercury	111770-10-15 09:34 G	42544501.77	42544501.90	42544502.04	0.0084	0.0003
Mercury	111771-01-11 10:46 G	42544589.83	42544589.95	42544590.08	0.0084	0.0020
Mercury	111771-04-09 11:58 G	42544677.89	42544678.00	42544678.12	0.0084	0.0038
Mercury	111771-07-06 13:10 G	42544765.95	42544766.05	42544766.15	0.0084	0.0055
Mercury	111771-10-02 14:08 G	42544854.04	42544854.09	42544854.17	0.0084	0.0073
Venus	111777-08-05 18:13 G	42546988.04	42546988.26	42546988.48	0.0081	0.0016
Venus	111778-03-19 05:30 G	42547213.61	42547213.73	42547213.86	0.0081	0.0067
Earth	111781-09-02 00:42 G	42548476.27	42548476.53	42548476.80	0.0079	0.0002
Moon	111781-09-02 04:03 G	42548476.40	42548476.67	42548476.94	0.0079	0.0003 *
Mercury	111920-01-01 14:51 G	42599000.03	42599000.12	42599000.21	0.0060	0.0053

Mercury	111920-03-29 15:49 G	42599088.04	42599088.16	42599088.31	0.0060	0.0044
Mercury	111920-06-25 17:01 G	42599176.07	42599176.21	42599176.39	0.0060	0.0035
Mercury	111920-09-21 18:42 G	42599264.11	42599264.28	42599264.47	0.0060	0.0025
Mercury	111920-12-18 20:08 G	42599352.16	42599352.34	42599352.54	0.0060	0.0016
Mercury	111921-03-16 21:49 G	42599440.21	42599440.41	42599440.60	0.0060	0.0006
Mercury	111921-06-12 23:01 G	42599528.27	42599528.46	42599528.66	0.0060	0.0004
Mercury	111921-09-09 00:13 G	42599616.33	42599616.51	42599616.71	0.0060	0.0013
Mercury	111921-12-06 01:54 G	42599704.40	42599704.58	42599704.76	0.0060	0.0022
Mercury	111922-03-04 02:51 G	42599792.47	42599792.62	42599792.80	0.0060	0.0032
Mercury	111922-05-31 04:03 G	42599880.55	42599880.67	42599880.84	0.0060	0.0042
Mercury	111922-08-27 05:44 G	42599968.65	42599968.74	42599968.85	0.0060	0.0051
Venus	111932-12-09 14:51 G	42603726.05	42603726.12	42603726.24	0.0063	0.0057
Venus	111933-07-22 18:27 G	42603951.07	42603951.27	42603951.48	0.0063	0.0019
Venus	111934-03-04 21:34 G	42604176.21	42604176.40	42604176.62	0.0064	0.0020
Venus	111934-10-16 00:27 G	42604401.46	42604401.52	42604401.63	0.0064	0.0059
Earth	111940-03-07 10:18 G	42606370.70	42606370.93	42606371.20	0.0066	0.0014
Moon	111940-03-07 11:30 G	42606370.72	42606370.98	42606371.25	0.0066	0.0012 *

# 113TH MILLENNIUM CE

**This is a list of transits visible from Pluto in the 113th millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	112015-09-25 18:56 G	42633966.25	42633966.29	42633966.35	0.0085	0.0078		

Mercury	112015-12-22 20:08 G	42634054.26	42634054.34	42634054.44	0.0085	0.0060
Mercury	112016-03-19 21:20 G	42634142.29	42634142.39	42634142.51	0.0085	0.0042
Mercury	112016-06-15 22:46 G	42634230.32	42634230.45	42634230.58	0.0085	0.0023
Mercury	112016-09-11 23:58 G	42634318.37	42634318.50	42634318.63	0.0084	0.0005
Mercury	112016-12-09 01:10 G	42634406.42	42634406.55	42634406.68	0.0084	0.0013
Mercury	112017-03-07 02:22 G	42634494.48	42634494.60	42634494.72	0.0084	0.0031
Mercury	112017-06-03 03:34 G	42634582.54	42634582.65	42634582.76	0.0084	0.0048
Mercury	112017-08-30 04:32 G	42634670.62	42634670.69	42634670.78	0.0084	0.0066
Mercury	112017-11-26 05:44 G	42634758.74	42634758.74	42634758.76	0.0084	0.0084
Venus	112023-09-06 02:37 G	42636868.39	42636868.61	42636868.84	0.0081	0.0004
Venus	112024-04-18 13:25 G	42637094.05	42637094.06	42637094.12	0.0081	0.0080
Moon	112027-09-05 22:18 G	42638329.16	42638329.43	42638329.70	0.0079	0.0011
Earth	112027-09-05 23:58 G	42638329.25	42638329.50	42638329.76	0.0079	0.0015 *
Mercury	112165-11-28 02:22 G	42688816.55	42688816.60	42688816.69	0.0060	0.0056
Mercury	112166-02-24 04:03 G	42688904.56	42688904.67	42688904.81	0.0060	0.0046
Mercury	112166-05-23 05:15 G	42688992.58	42688992.72	42688992.89	0.0060	0.0037
Mercury	112166-08-19 07:10 G	42689080.62	42689080.80	42689080.97	0.0060	0.0027
Mercury	112166-11-15 08:08 G	42689168.67	42689168.84	42689169.04	0.0060	0.0018
Mercury	112167-02-11 09:34 G	42689256.72	42689256.90	42689257.11	0.0060	0.0009
Mercury	112167-05-10 11:15 G	42689344.77	42689344.97	42689345.17	0.0060	0.0001
Mercury	112167-08-06 12:27 G	42689432.83	42689433.02	42689433.22	0.0060	0.0011
Mercury	112167-11-02 13:54 G	42689520.90	42689521.08	42689521.27	0.0060	0.0020
Mercury	112168-01-29 15:06 G	42689608.97	42689609.13	42689609.32	0.0060	0.0030
Mercury	112168-04-26 16:32 G	42689697.06	42689697.19	42689697.35	0.0060	0.0040
Mercury	112168-07-23 17:44 G	42689785.15	42689785.24	42689785.37	0.0060	0.0049
Mercury	112168-10-19 19:39 G	42689873.28	42689873.32	42689873.36	0.0060	0.0059
Venus	112179-01-08 23:30 G	42693606.36	42693606.48	42693606.64	0.0063	0.0048
Venus	112179-08-22 03:06 G	42693831.42	42693831.63	42693831.85	0.0063	0.0010
Venus	112180-04-03 06:27 G	42694056.58	42694056.77	42694056.97	0.0064	0.0028
Moon	112186-03-10 08:08 G	42696223.58	42696223.84	42696224.10	0.0066	0.0004

Earth	112186-03-10 11:15 G	42696223.72	42696223.97	42696224.23	0.0066	0.0005	*
Mercury	112261-08-23 09:20 G	42723782.89	42723782.89	42723782.92	0.0085	0.0084	
Mercury	112261-11-19 10:32 G	42723870.87	42723870.94	42723871.04	0.0085	0.0066	
Mercury	112262-02-15 12:13 G	42723958.90	42723959.01	42723959.11	0.0085	0.0047	
Mercury	112262-05-14 13:25 G	42724046.93	42724047.06	42724047.18	0.0085	0.0029	
Mercury	112262-08-10 14:22 G	42724134.97	42724135.10	42724135.24	0.0085	0.0011	
Mercury	112262-11-06 15:34 G	42724223.02	42724223.15	42724223.29	0.0084	0.0008	
Mercury	112263-02-02 16:46 G	42724311.08	42724311.20	42724311.33	0.0084	0.0025	
Mercury	112263-05-01 17:44 G	42724399.14	42724399.24	42724399.37	0.0084	0.0043	
Mercury	112263-07-28 19:10 G	42724487.21	42724487.30	42724487.39	0.0084	0.0060	
Mercury	112263-10-24 20:08 G	42724575.30	42724575.34	42724575.40	0.0084	0.0078	
Mars	112268-05-24 12:27 G	42726248.85	42726249.02	42726249.24	0.0082	0.0066	
Venus	112269-02-22 23:44 G	42726523.40	42726523.49	42726523.62	0.0081	0.0071	
Venus	112269-10-06 11:44 G	42726748.77	42726748.99	42726749.21	0.0081	0.0013	
Moon	112273-09-08 20:51 G	42728182.13	42728182.37	42728182.64	0.0079	0.0020	
Earth	112273-09-09 00:56 G	42728182.29	42728182.54	42728182.79	0.0079	0.0023	*
Mercury	112411-10-26 15:49 G	42778633.09	42778633.16	42778633.27	0.0060	0.0053	
Mercury	112412-01-22 17:01 G	42778721.10	42778721.21	42778721.37	0.0060	0.0044	
Mercury	112412-04-19 18:56 G	42778809.13	42778809.29	42778809.45	0.0060	0.0034	
Mercury	112412-07-16 20:08 G	42778897.17	42778897.34	42778897.53	0.0060	0.0025	
Mercury	112412-10-12 21:20 G	42778985.22	42778985.39	42778985.60	0.0060	0.0016	
Mercury	112413-01-08 23:01 G	42779073.27	42779073.46	42779073.66	0.0060	0.0006	
Mercury	112413-04-07 00:27 G	42779161.33	42779161.52	42779161.72	0.0060	0.0004	
Mercury	112413-07-04 01:54 G	42779249.39	42779249.58	42779249.78	0.0060	0.0013	
Mercury	112413-09-30 03:06 G	42779337.46	42779337.63	42779337.82	0.0060	0.0023	
Mercury	112413-12-27 04:32 G	42779425.53	42779425.69	42779425.87	0.0060	0.0032	
Mercury	112414-03-25 05:44 G	42779513.62	42779513.74	42779513.90	0.0060	0.0042	
Mercury	112414-06-21 07:25 G	42779601.72	42779601.81	42779601.92	0.0060	0.0052	
Mars	112423-09-09 09:20 G	42782968.71	42782968.89	42782969.12	0.0063	0.0046	
Venus	112425-02-08 10:18 G	42783486.75	42783486.93	42783487.12	0.0063	0.0032	

Venus	112425-09-21 13:39 G	42783711.86	42783712.07	42783712.29	0.0063	0.0006
Venus	112426-05-04 16:46 G	42783937.06	42783937.20	42783937.37	0.0064	0.0044
Moon	112432-03-13 13:25 G	42786076.82	42786077.06	42786077.31	0.0066	0.0005
Earth	112432-03-13 15:20 G	42786076.89	42786077.14	42786077.40	0.0066	0.0007 *
Mercury	112507-07-22 00:56 G	42813599.51	42813599.54	42813599.59	0.0085	0.0080
Mercury	112507-10-18 02:08 G	42813687.51	42813687.59	42813687.68	0.0085	0.0062
Mercury	112508-01-14 03:20 G	42813775.53	42813775.64	42813775.76	0.0085	0.0044
Mercury	112508-04-11 04:46 G	42813863.57	42813863.70	42813863.82	0.0085	0.0026
Mercury	112508-07-08 05:58 G	42813951.62	42813951.75	42813951.88	0.0084	0.0008
Mercury	112508-10-04 07:10 G	42814039.67	42814039.80	42814039.93	0.0084	0.0010
Mercury	112508-12-31 08:08 G	42814127.72	42814127.84	42814127.97	0.0084	0.0028
Mercury	112509-03-29 09:20 G	42814215.79	42814215.89	42814216.01	0.0084	0.0046
Mercury	112509-06-25 10:32 G	42814303.86	42814303.94	42814304.03	0.0084	0.0063
Mercury	112509-09-21 11:30 G	42814391.96	42814391.98	42814392.03	0.0084	0.0081
Mars	112514-10-18 17:44 G	42816244.94	42816245.24	42816245.57	0.0081	0.0024
Venus	112515-03-26 11:58 G	42816403.83	42816404.00	42816404.22	0.0081	0.0040
Venus	112515-11-06 23:30 G	42816629.31	42816629.48	42816629.69	0.0081	0.0044
Earth	112519-09-13 06:42 G	42818035.53	42818035.78	42818036.04	0.0079	0.0017
Moon	112519-09-13 07:10 G	42818035.55	42818035.80	42818036.05	0.0079	0.0013 *
Mercury	112657-09-23 05:15 G	42868449.63	42868449.72	42868449.83	0.0060	0.0051
Mercury	112657-12-20 06:27 G	42868537.65	42868537.77	42868537.93	0.0060	0.0042
Mercury	112658-03-18 07:39 G	42868625.68	42868625.82	42868626.01	0.0060	0.0033
Mercury	112658-06-14 09:20 G	42868713.72	42868713.89	42868714.08	0.0060	0.0023
Mercury	112658-09-10 10:46 G	42868801.76	42868801.95	42868802.15	0.0060	0.0014
Mercury	112658-12-07 12:13 G	42868889.82	42868890.01	42868890.21	0.0060	0.0004
Mercury	112659-03-05 13:39 G	42868977.88	42868978.07	42868978.27	0.0060	0.0005
Mercury	112659-06-01 14:51 G	42869065.94	42869066.12	42869066.32	0.0060	0.0015
Mercury	112659-08-28 16:17 G	42869154.01	42869154.18	42869154.37	0.0060	0.0025
Mercury	112659-11-24 17:29 G	42869242.08	42869242.23	42869242.41	0.0060	0.0034
Mercury	112660-02-20 19:10 G	42869330.17	42869330.30	42869330.44	0.0060	0.0044



Mercury	112660-05-18 20:08 G	42869418.27	42869418.34	42869418.45	0.0060	0.0054
Mars	112670-02-01 20:37 G	42872964.08	42872964.36	42872964.66	0.0063	0.0019
Venus	112670-07-29 17:15 G	42873142.14	42873142.22	42873142.34	0.0063	0.0056
Venus	112671-03-11 20:22 G	42873367.16	42873367.35	42873367.58	0.0063	0.0019
Venus	112671-10-22 23:44 G	42873592.30	42873592.49	42873592.71	0.0064	0.0020
Venus	112672-06-04 02:51 G	42873817.56	42873817.62	42873817.72	0.0064	0.0059
Earth	112678-03-17 18:56 G	42875930.04	42875930.29	42875930.55	0.0066	0.0008
Moon	112678-03-17 21:20 G	42875930.15	42875930.39	42875930.65	0.0066	0.0007 *
Mercury	112753-06-18 16:32 G	42903416.14	42903416.19	42903416.24	0.0085	0.0077
Mercury	112753-09-14 17:44 G	42903504.15	42903504.24	42903504.33	0.0085	0.0059
Mercury	112753-12-11 18:56 G	42903592.17	42903592.29	42903592.40	0.0085	0.0041
Mercury	112754-03-09 20:08 G	42903680.21	42903680.34	42903680.47	0.0085	0.0023
Mercury	112754-06-05 21:20 G	42903768.26	42903768.39	42903768.52	0.0084	0.0005
Mercury	112754-09-01 22:32 G	42903856.31	42903856.44	42903856.57	0.0084	0.0013
Mercury	112754-11-28 23:44 G	42903944.37	42903944.49	42903944.61	0.0084	0.0031
Mercury	112755-02-25 00:56 G	42904032.43	42904032.54	42904032.65	0.0084	0.0048
Mercury	112755-05-24 01:53 G	42904120.51	42904120.58	42904120.67	0.0084	0.0066
Mercury	112755-08-20 03:05 G	42904208.63	42904208.63	42904208.65	0.0084	0.0083
Venus	112761-04-26 00:41 G	42906284.31	42906284.53	42906284.76	0.0081	0.0009
Venus	112761-12-07 11:29 G	42906509.92	42906509.98	42906510.10	0.0081	0.0074
Earth	112765-09-16 12:13 G	42907888.75	42907889.01	42907889.28	0.0079	0.0009
Moon	112765-09-16 16:03 G	42907888.91	42907889.17	42907889.44	0.0079	0.0005 *
Mercury	112903-05-25 17:29 G	42958178.17	42958178.23	42958178.33	0.0060	0.0055
Mercury	112903-08-21 18:41 G	42958266.18	42958266.28	42958266.44	0.0060	0.0046
Mercury	112903-11-17 20:37 G	42958354.21	42958354.36	42958354.52	0.0060	0.0036
Mercury	112904-02-13 21:49 G	42958442.25	42958442.41	42958442.60	0.0060	0.0027
Mercury	112904-05-11 23:15 G	42958530.29	42958530.47	42958530.67	0.0060	0.0018
Mercury	112904-08-08 00:56 G	42958618.34	42958618.54	42958618.74	0.0060	0.0008
Mercury	112904-11-04 02:22 G	42958706.40	42958706.60	42958706.80	0.0060	0.0002
Mercury	112905-01-31 03:34 G	42958794.46	42958794.65	42958794.85	0.0060	0.0011

Mercury	112905-04-29 04:46 G	42958882.53	42958882.70	42958882.90	0.0060	0.0021
Mercury	112905-07-26 06:13 G	42958970.60	42958970.76	42958970.94	0.0060	0.0030
Mercury	112905-10-22 07:53 G	42959058.68	42959058.83	42959058.98	0.0060	0.0040
Mercury	112906-01-18 08:51 G	42959146.78	42959146.87	42959147.00	0.0060	0.0050
Mercury	112906-04-16 10:03 G	42959234.91	42959234.92	42959234.99	0.0060	0.0059
Mars	112916-06-27 14:08 G	42962959.81	42962960.09	42962960.40	0.0063	0.0017
Venus	112916-08-29 05:15 G	42963022.56	42963022.72	42963022.92	0.0063	0.0036
Venus	112917-04-11 09:05 G	42963247.66	42963247.88	42963248.09	0.0063	0.0003
Venus	112917-11-22 11:58 G	42963472.85	42963473.00	42963473.18	0.0064	0.0041
Moon	112923-03-20 09:05 G	42965416.88	42965416.88	42965416.93	0.0066	0.0065
Earth	112924-03-21 00:56 G	42965783.31	42965783.54	42965783.81	0.0066	0.0017
Moon	112924-03-21 03:05 G	42965783.39	42965783.63	42965783.91	0.0066	0.0016 *
Mercury	112999-05-16 08:22 G	42993232.78	42993232.85	42993232.93	0.0085	0.0068
Mercury	112999-08-12 09:34 G	42993320.80	42993320.90	42993321.01	0.0085	0.0050
Mercury	112999-11-08 10:46 G	42993408.83	42993408.95	42993409.08	0.0085	0.0032
Mercury	113000-02-04 12:13 G	42993496.88	42993497.01	42993497.14	0.0085	0.0014
Mercury	113000-05-03 13:10 G	42993584.92	42993585.05	42993585.19	0.0084	0.0005
Mercury	113000-07-30 14:22 G	42993672.98	42993673.10	42993673.23	0.0084	0.0022
Mercury	113000-10-26 15:34 G	42993761.04	42993761.15	42993761.27	0.0084	0.0040

# 114TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 114th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Mercury	113001-01-22 16:46 G	42993849.11	42993849.20	42993849.30	0.0084	0.0057
Mercury	113001-04-20 17:44 G	42993937.20	42993937.24	42993937.31	0.0084	0.0075
Venus	113006-10-14 04:03 G	42995939.51	42995939.67	42995939.86	0.0081	0.0050
Venus	113007-05-27 15:49 G	42996164.96	42996165.16	42996165.37	0.0081	0.0033
Moon	113011-09-20 21:05 G	42997742.12	42997742.38	42997742.66	0.0078	0.0015
Earth	113011-09-20 21:34 G	42997742.15	42997742.40	42997742.66	0.0078	0.0012 *
Mercury	113149-04-22 07:10 G	43047994.71	43047994.80	43047994.92	0.0060	0.0051
Mercury	113149-07-19 08:22 G	43048082.73	43048082.85	43048083.01	0.0060	0.0042
Mercury	113149-10-15 09:49 G	43048170.76	43048170.91	43048171.10	0.0060	0.0033
Mercury	113150-01-11 11:29 G	43048258.81	43048258.98	43048259.17	0.0060	0.0023
Mercury	113150-04-09 12:56 G	43048346.85	43048347.04	43048347.24	0.0060	0.0014
Mercury	113150-07-06 14:22 G	43048434.91	43048435.10	43048435.30	0.0060	0.0004
Mercury	113150-10-02 15:49 G	43048522.97	43048523.16	43048523.36	0.0060	0.0005
Mercury	113150-12-29 17:01 G	43048611.03	43048611.21	43048611.41	0.0060	0.0015
Mercury	113151-03-27 18:27 G	43048699.10	43048699.27	43048699.46	0.0060	0.0024
Mercury	113151-06-23 19:39 G	43048787.18	43048787.32	43048787.50	0.0060	0.0034
Mercury	113151-09-19 21:05 G	43048875.26	43048875.38	43048875.53	0.0060	0.0044
Mercury	113151-12-16 22:17 G	43048963.36	43048963.43	43048963.55	0.0060	0.0053
Venus	113162-02-16 12:41 G	43052677.96	43052678.03	43052678.15	0.0063	0.0056
Venus	113162-09-29 16:17 G	43052902.98	43052903.18	43052903.39	0.0063	0.0019
Mars	113162-11-21 03:05 G	43052955.44	43052955.63	43052955.83	0.0063	0.0048
Venus	113163-05-12 19:25 G	43053128.12	43053128.31	43053128.53	0.0063	0.0020
Venus	113163-12-23 22:32 G	43053353.38	43053353.44	43053353.56	0.0064	0.0058
Earth	113169-03-23 16:32 G	43055270.15	43055270.19	43055270.30	0.0066	0.0063
Moon	113169-03-23 18:13 G	43055270.22	43055270.26	43055270.37	0.0066	0.0063 *
Moon	113170-03-25 02:51 G	43055636.38	43055636.62	43055636.87	0.0066	0.0021
Earth	113170-03-25 05:29 G	43055636.51	43055636.73	43055637.00	0.0066	0.0021 *
Mercury	113245-01-14 22:32 G	43082961.42	43082961.44	43082961.49	0.0085	0.0082
Mercury	113245-04-12 23:58 G	43083049.42	43083049.50	43083049.59	0.0085	0.0063

Mercury	113245-07-10 01:10 G	43083137.44	43083137.55	43083137.66	0.0085	0.0045
Mercury	113245-10-06 02:22 G	43083225.48	43083225.60	43083225.73	0.0085	0.0027
Mercury	113246-01-02 03:34 G	43083313.52	43083313.65	43083313.79	0.0085	0.0010
Mercury	113246-03-31 04:46 G	43083401.57	43083401.70	43083401.84	0.0084	0.0009
Mercury	113246-06-27 05:58 G	43083489.63	43083489.75	43083489.88	0.0084	0.0026
Mercury	113246-09-23 07:10 G	43083577.69	43083577.80	43083577.92	0.0084	0.0044
Mercury	113246-12-20 08:22 G	43083665.76	43083665.85	43083665.94	0.0084	0.0062
Mercury	113247-03-18 09:20 G	43083753.86	43083753.89	43083753.94	0.0084	0.0079
Venus	113252-11-12 17:15 G	43085820.01	43085820.22	43085820.45	0.0081	0.0016
Venus	113253-06-26 04:32 G	43086045.59	43086045.69	43086045.84	0.0081	0.0067
Moon	113257-09-23 00:41 G	43087595.30	43087595.53	43087595.80	0.0078	0.0027
Earth	113257-09-23 04:46 G	43087595.46	43087595.70	43087595.96	0.0078	0.0024 *
Mercury	113394-12-21 19:53 G	43137723.26	43137723.33	43137723.43	0.0060	0.0054
Mercury	113395-03-19 21:05 G	43137811.28	43137811.38	43137811.54	0.0060	0.0045
Mercury	113395-06-15 23:01 G	43137899.30	43137899.46	43137899.62	0.0060	0.0035
Mercury	113395-09-12 00:13 G	43137987.34	43137987.51	43137987.70	0.0060	0.0026
Mercury	113395-12-09 01:25 G	43138075.39	43138075.56	43138075.77	0.0060	0.0017
Mercury	113396-03-06 03:05 G	43138163.44	43138163.63	43138163.83	0.0060	0.0007
Mercury	113396-06-02 04:32 G	43138251.50	43138251.69	43138251.89	0.0060	0.0003
Mercury	113396-08-29 05:44 G	43138339.56	43138339.74	43138339.95	0.0060	0.0012
Mercury	113396-11-25 07:25 G	43138427.63	43138427.81	43138428.00	0.0060	0.0021
Mercury	113397-02-21 08:22 G	43138515.70	43138515.85	43138516.04	0.0060	0.0031
Mercury	113397-05-20 10:03 G	43138603.78	43138603.92	43138604.07	0.0060	0.0040
Mercury	113397-08-16 11:01 G	43138691.88	43138691.96	43138692.10	0.0060	0.0050
Mercury	113397-11-12 12:41 G	43138780.02	43138780.03	43138780.07	0.0060	0.0060
Venus	113408-03-19 01:10 G	43142558.38	43142558.55	43142558.75	0.0063	0.0034
Venus	113408-10-30 04:46 G	43142783.48	43142783.70	43142783.91	0.0063	0.0003
Venus	113409-06-12 07:25 G	43143008.67	43143008.81	43143009.00	0.0064	0.0042
Earth	113415-03-27 23:58 G	43145123.38	43145123.50	43145123.69	0.0066	0.0052
Moon	113415-03-28 01:39 G	43145123.45	43145123.57	43145123.76	0.0066	0.0054 *

Earth	113416-03-28 13:10 G	43145489.85	43145490.05	43145490.29	0.0066	0.0032
Moon	113416-03-28 13:53 G	43145489.89	43145490.08	43145490.31	0.0066	0.0035 *
Mercury	113490-12-13 14:51 G	43172778.06	43172778.12	43172778.20	0.0085	0.0071
Mercury	113491-03-11 16:03 G	43172866.08	43172866.17	43172866.28	0.0085	0.0053
Mercury	113491-06-07 17:29 G	43172954.11	43172954.23	43172954.35	0.0085	0.0035
Mercury	113491-09-03 18:41 G	43173042.15	43173042.28	43173042.41	0.0085	0.0017
Mercury	113491-11-30 19:53 G	43173130.20	43173130.33	43173130.46	0.0085	0.0001
Mercury	113492-02-26 21:05 G	43173218.25	43173218.38	43173218.51	0.0084	0.0019
Mercury	113492-05-24 22:17 G	43173306.31	43173306.43	43173306.55	0.0084	0.0036
Mercury	113492-08-20 23:15 G	43173394.38	43173394.47	43173394.58	0.0084	0.0054
Mercury	113492-11-17 00:41 G	43173482.46	43173482.53	43173482.59	0.0084	0.0072
Venus	113498-05-02 20:51 G	43175475.21	43175475.37	43175475.54	0.0081	0.0056
Mars	113498-07-02 14:51 G	43175535.81	43175536.12	43175536.45	0.0081	0.0019
Venus	113498-12-14 08:08 G	43175700.65	43175700.84	43175701.07	0.0081	0.0028
Earth	113503-09-28 14:37 G	43177448.92	43177449.11	43177449.34	0.0078	0.0047
Moon	113503-09-28 17:44 G	43177449.05	43177449.24	43177449.47	0.0078	0.0044 *
Mercury	113640-08-22 08:37 G	43227451.82	43227451.86	43227451.93	0.0059	0.0057
Mercury	113640-11-18 09:49 G	43227539.82	43227539.91	43227540.05	0.0060	0.0048
Mercury	113641-02-14 11:15 G	43227627.84	43227627.97	43227628.14	0.0060	0.0039
Mercury	113641-05-13 13:10 G	43227715.88	43227716.05	43227716.22	0.0060	0.0029
Mercury	113641-08-09 14:22 G	43227803.92	43227804.10	43227804.29	0.0060	0.0020
Mercury	113641-11-05 15:49 G	43227891.97	43227892.16	43227892.36	0.0060	0.0011
Mercury	113642-02-01 17:15 G	43227980.02	43227980.22	43227980.42	0.0060	0.0001
Mercury	113642-04-30 18:41 G	43228068.08	43228068.28	43228068.48	0.0060	0.0008
Mercury	113642-07-27 19:39 G	43228156.15	43228156.32	43228156.53	0.0060	0.0018
Mercury	113642-10-23 21:05 G	43228244.22	43228244.38	43228244.57	0.0060	0.0027
Mercury	113643-01-19 22:46 G	43228332.30	43228332.45	43228332.61	0.0060	0.0036
Mercury	113643-04-17 23:44 G	43228420.39	43228420.49	43228420.64	0.0060	0.0046
Mercury	113643-07-15 01:25 G	43228508.50	43228508.56	43228508.64	0.0060	0.0056
Venus	113653-09-05 10:17 G	43232213.81	43232213.93	43232214.06	0.0063	0.0051

Venus	113654-04-18 13:25 G	43232438.85	43232439.06	43232439.28	0.0063	0.0014
Venus	113654-11-29 16:32 G	43232664.00	43232664.19	43232664.40	0.0063	0.0023
Venus	113655-07-12 19:25 G	43232889.28	43232889.31	43232889.39	0.0064	0.0062
Moon	113661-03-30 04:03 G	43234976.50	43234976.67	43234976.85	0.0066	0.0046
Earth	113661-03-30 06:27 G	43234976.60	43234976.77	43234976.98	0.0066	0.0043 *
Earth	113662-03-31 19:10 G	43235343.13	43235343.30	43235343.53	0.0066	0.0042
Moon	113662-03-31 20:37 G	43235343.16	43235343.36	43235343.55	0.0066	0.0044 *
Mercury	113736-08-14 05:15 G	43262506.70	43262506.72	43262506.76	0.0085	0.0083
Mercury	113736-11-10 06:27 G	43262594.70	43262594.77	43262594.87	0.0085	0.0065
Mercury	113737-02-06 07:39 G	43262682.72	43262682.82	43262682.94	0.0085	0.0047
Mercury	113737-05-05 09:05 G	43262770.76	43262770.88	43262771.01	0.0085	0.0029
Mercury	113737-08-01 10:17 G	43262858.80	43262858.93	43262859.06	0.0085	0.0011
Mercury	113737-10-28 11:29 G	43262946.85	43262946.98	43262947.12	0.0084	0.0008
Mercury	113738-01-24 12:41 G	43263034.91	43263035.03	43263035.16	0.0084	0.0025
Mercury	113738-04-22 13:53 G	43263122.97	43263123.08	43263123.20	0.0084	0.0043
Mercury	113738-07-19 14:51 G	43263211.04	43263211.12	43263211.23	0.0084	0.0061
Mercury	113738-10-15 16:17 G	43263299.14	43263299.18	43263299.23	0.0084	0.0077
Venus	113744-06-02 10:32 G	43265355.73	43265355.94	43265356.17	0.0081	0.0019
Mars	113744-11-25 22:32 G	43265532.36	43265532.44	43265532.59	0.0081	0.0076
Venus	113745-01-13 21:49 G	43265581.29	43265581.41	43265581.57	0.0081	0.0064
Moon	113749-09-30 19:39 G	43267302.15	43267302.32	43267302.51	0.0078	0.0059
Earth	113749-09-30 22:03 G	43267302.29	43267302.42	43267302.61	0.0078	0.0062 *
Mercury	113886-04-23 22:03 G	43317180.38	43317180.42	43317180.49	0.0059	0.0057
Mercury	113886-07-20 23:29 G	43317268.38	43317268.48	43317268.61	0.0060	0.0048
Mercury	113886-10-17 00:41 G	43317356.40	43317356.53	43317356.70	0.0060	0.0039
Mercury	113887-01-13 02:37 G	43317444.44	43317444.61	43317444.78	0.0060	0.0029
Mercury	113887-04-11 03:49 G	43317532.48	43317532.66	43317532.86	0.0060	0.0020
Mercury	113887-07-08 05:15 G	43317620.53	43317620.72	43317620.92	0.0060	0.0011
Mercury	113887-10-04 06:41 G	43317708.59	43317708.78	43317708.98	0.0060	0.0002
Mercury	113887-12-31 08:08 G	43317796.65	43317796.84	43317797.04	0.0060	0.0008

Mercury	113888-03-28 09:20 G	43317884.71	43317884.89	43317885.09	0.0060	0.0018
Mercury	113888-06-24 10:46 G	43317972.78	43317972.95	43317973.14	0.0060	0.0027
Mercury	113888-09-20 12:13 G	43318060.86	43318061.01	43318061.18	0.0060	0.0036
Mercury	113888-12-17 13:25 G	43318148.95	43318149.06	43318149.20	0.0060	0.0046
Mercury	113889-03-15 14:51 G	43318237.06	43318237.12	43318237.21	0.0060	0.0056
Venus	113899-02-23 20:22 G	43321869.35	43321869.35	43321869.38	0.0063	0.0063
Venus	113899-10-06 23:29 G	43322094.30	43322094.48	43322094.70	0.0063	0.0026
Mars	113900-03-13 10:46 G	43322251.66	43322251.95	43322252.25	0.0063	0.0019
Venus	113900-05-20 03:05 G	43322319.42	43322319.63	43322319.85	0.0063	0.0012
Venus	113900-12-31 06:13 G	43322544.64	43322544.76	43322544.91	0.0064	0.0050
Earth	113907-04-04 16:03 G	43324829.95	43324830.17	43324830.42	0.0066	0.0025
Moon	113907-04-04 19:25 G	43324830.10	43324830.31	43324830.56	0.0066	0.0026 *
Moon	113908-04-05 02:08 G	43325196.49	43325196.59	43325196.70	0.0066	0.0060
Earth	113908-04-05 05:29 G	43325196.62	43325196.73	43325196.84	0.0066	0.0060 *
Mercury	113982-04-15 20:51 G	43352235.37	43352235.37	43352235.39	0.0085	0.0085
Mercury	113982-07-12 22:03 G	43352323.35	43352323.42	43352323.51	0.0085	0.0067
Mercury	113982-10-08 23:15 G	43352411.38	43352411.47	43352411.59	0.0085	0.0049
Mercury	113983-01-05 00:41 G	43352499.41	43352499.53	43352499.66	0.0085	0.0031
Mercury	113983-04-03 01:53 G	43352587.45	43352587.58	43352587.72	0.0085	0.0013
Mercury	113983-06-30 03:20 G	43352675.50	43352675.64	43352675.77	0.0085	0.0006
Mercury	113983-09-26 04:17 G	43352763.56	43352763.68	43352763.81	0.0084	0.0023
Mercury	113983-12-23 05:29 G	43352851.62	43352851.73	43352851.85	0.0084	0.0041
Mercury	113984-03-20 06:41 G	43352939.69	43352939.78	43352939.88	0.0084	0.0058
Mercury	113984-06-16 07:53 G	43353027.78	43353027.83	43353027.89	0.0084	0.0076
Venus	113989-11-20 16:46 G	43355011.04	43355011.20	43355011.40	0.0081	0.0048
Venus	113990-07-04 04:46 G	43355236.50	43355236.70	43355236.91	0.0081	0.0035
Earth	113994-10-03 07:39 G	43356788.65	43356788.82	43356789.04	0.0079	0.0052
Moon	113994-10-03 10:17 G	43356788.73	43356788.93	43356789.15	0.0079	0.0049 *

# 115TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 115th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	114131-12-24 10:46	G	43406908.94	43406908.95	43406909.02	0.0059	0.0059	
Mercury	114132-03-21 12:13	G	43406996.93	43406997.01	43406997.15	0.0059	0.0050	
Mercury	114132-06-17 14:08	G	43407084.95	43407085.09	43407085.24	0.0060	0.0040	
Mercury	114132-09-13 15:20	G	43407172.98	43407173.14	43407173.32	0.0060	0.0031	
Mercury	114132-12-10 16:46	G	43407261.03	43407261.20	43407261.40	0.0060	0.0022	
Mercury	114133-03-08 18:27	G	43407349.08	43407349.27	43407349.46	0.0060	0.0012	
Mercury	114133-06-04 19:53	G	43407437.13	43407437.33	43407437.53	0.0060	0.0003	
Mercury	114133-08-31 21:05	G	43407525.19	43407525.38	43407525.58	0.0060	0.0007	
Mercury	114133-11-27 22:32	G	43407613.25	43407613.44	43407613.64	0.0060	0.0016	
Mercury	114134-02-23 23:58	G	43407701.32	43407701.50	43407701.68	0.0060	0.0025	
Mercury	114134-05-23 00:56	G	43407789.40	43407789.54	43407789.72	0.0060	0.0035	
Mercury	114134-08-19 02:37	G	43407877.49	43407877.61	43407877.75	0.0060	0.0044	
Mercury	114134-11-15 03:34	G	43407965.59	43407965.65	43407965.77	0.0060	0.0054	
Venus	114145-03-26 08:51	G	43411749.73	43411749.87	43411750.06	0.0063	0.0040	
Venus	114145-11-06 12:27	G	43411974.81	43411975.02	43411975.24	0.0063	0.0003	
Venus	114146-06-19 15:20	G	43412199.98	43412200.14	43412200.34	0.0063	0.0036	
Mars	114146-08-06 04:32	G	43412247.43	43412247.69	43412248.00	0.0063	0.0023	
Moon	114153-04-06 22:46	G	43414683.19	43414683.45	43414683.71	0.0066	0.0008	
Earth	114153-04-07 00:56	G	43414683.30	43414683.54	43414683.80	0.0066	0.0011	*
Mercury	114228-03-13 13:25	G	43442052.00	43442052.06	43442052.14	0.0085	0.0072	



Mercury	114228-06-09 14:51 G	43442140.02	43442140.12	43442140.22	0.0085	0.0054
Mercury	114228-09-05 16:03 G	43442228.05	43442228.17	43442228.29	0.0085	0.0036
Mercury	114228-12-02 17:15 G	43442316.09	43442316.22	43442316.35	0.0085	0.0018
Mercury	114229-02-28 18:27 G	43442404.14	43442404.27	43442404.40	0.0085	0.0001
Mercury	114229-05-27 19:25 G	43442492.19	43442492.31	43442492.45	0.0084	0.0018
Mercury	114229-08-23 20:51 G	43442580.25	43442580.37	43442580.49	0.0084	0.0035
Mercury	114229-11-19 21:49 G	43442668.32	43442668.41	43442668.52	0.0084	0.0052
Mercury	114230-02-15 23:15 G	43442756.40	43442756.47	43442756.54	0.0084	0.0070
Venus	114235-12-22 09:20 G	43444891.66	43444891.89	43444892.11	0.0081	0.0002
Venus	114236-08-03 20:51 G	43445117.37	43445117.37	43445117.38	0.0081	0.0081
Moon	114240-10-06 15:49 G	43446641.94	43446642.16	43446642.42	0.0079	0.0028
Earth	114240-10-06 19:25 G	43446642.08	43446642.31	43446642.58	0.0079	0.0025 *
Mercury	114377-08-25 00:56 G	43496637.51	43496637.54	43496637.59	0.0059	0.0058
Mercury	114377-11-21 02:08 G	43496725.49	43496725.59	43496725.72	0.0059	0.0049
Mercury	114378-02-17 03:34 G	43496813.52	43496813.65	43496813.81	0.0060	0.0040
Mercury	114378-05-16 04:46 G	43496901.55	43496901.70	43496901.89	0.0060	0.0031
Mercury	114378-08-12 06:12 G	43496989.59	43496989.76	43496989.96	0.0060	0.0022
Mercury	114378-11-08 07:53 G	43497077.64	43497077.83	43497078.03	0.0060	0.0012
Mercury	114379-02-04 09:20 G	43497165.70	43497165.89	43497166.09	0.0060	0.0003
Mercury	114379-05-03 10:46 G	43497253.75	43497253.95	43497254.15	0.0060	0.0007
Mercury	114379-07-30 11:58 G	43497341.82	43497342.00	43497342.20	0.0060	0.0016
Mercury	114379-10-26 13:39 G	43497429.89	43497430.07	43497430.25	0.0060	0.0025
Mercury	114380-01-22 14:36 G	43497517.97	43497518.11	43497518.29	0.0060	0.0035
Mercury	114380-04-19 16:03 G	43497606.05	43497606.17	43497606.32	0.0060	0.0044
Mercury	114380-07-16 17:15 G	43497694.16	43497694.22	43497694.33	0.0060	0.0054
Venus	114390-09-13 19:39 G	43501405.22	43501405.32	43501405.48	0.0063	0.0051
Venus	114391-04-26 23:15 G	43501630.27	43501630.47	43501630.69	0.0063	0.0014
Venus	114391-12-08 02:36 G	43501855.41	43501855.61	43501855.81	0.0063	0.0024
Venus	114392-07-20 05:29 G	43502080.70	43502080.73	43502080.80	0.0064	0.0062
Earth	114399-04-11 11:00 G	43504536.72	43504536.96	43504537.22	0.0066	0.0009

Moon	114399-04-11 14:36 G	43504536.87	43504537.11	43504537.38	0.0066	0.0009 *
Mercury	114473-11-12 05:15 G	43531780.66	43531780.72	43531780.80	0.0085	0.0072
Mercury	114474-02-08 06:27 G	43531868.68	43531868.77	43531868.88	0.0085	0.0054
Mercury	114474-05-07 07:53 G	43531956.71	43531956.83	43531956.95	0.0085	0.0036
Mercury	114474-08-03 09:05 G	43532044.75	43532044.88	43532045.01	0.0085	0.0018
Mercury	114474-10-30 10:17 G	43532132.80	43532132.93	43532133.06	0.0085	0.0001
Mercury	114475-01-26 11:29 G	43532220.85	43532220.98	43532221.11	0.0084	0.0017
Mercury	114475-04-24 12:27 G	43532308.91	43532309.02	43532309.15	0.0084	0.0036
Mercury	114475-07-21 13:53 G	43532396.98	43532397.08	43532397.18	0.0084	0.0052
Mercury	114475-10-17 14:51 G	43532485.06	43532485.12	43532485.20	0.0084	0.0070
Venus	114481-06-09 16:03 G	43534546.97	43534547.17	43534547.39	0.0081	0.0027
Venus	114482-01-21 03:20 G	43534772.50	43534772.64	43534772.82	0.0081	0.0056
Mars	114482-03-17 23:00 G	43534828.15	43534828.46	43534828.80	0.0081	0.0009
Moon	114486-10-10 09:48 G	43536495.66	43536495.91	43536496.19	0.0078	0.0018
Earth	114486-10-10 11:00 G	43536495.70	43536495.96	43536496.22	0.0078	0.0015 *
Mercury	114623-07-23 15:05 G	43586454.05	43586454.13	43586454.25	0.0059	0.0051
Mercury	114623-10-19 16:32 G	43586542.07	43586542.19	43586542.35	0.0059	0.0042
Mercury	114624-01-15 17:58 G	43586630.10	43586630.25	43586630.43	0.0060	0.0033
Mercury	114624-04-12 19:39 G	43586718.14	43586718.32	43586718.51	0.0060	0.0023
Mercury	114624-07-09 21:05 G	43586806.19	43586806.38	43586806.57	0.0060	0.0014
Mercury	114624-10-05 22:32 G	43586894.24	43586894.44	43586894.64	0.0060	0.0005
Mercury	114625-01-01 23:44 G	43586982.30	43586982.49	43586982.70	0.0060	0.0005
Mercury	114625-03-31 01:10 G	43587070.36	43587070.55	43587070.75	0.0060	0.0014
Mercury	114625-06-27 02:36 G	43587158.43	43587158.61	43587158.80	0.0060	0.0023
Mercury	114625-09-23 03:34 G	43587246.51	43587246.65	43587246.84	0.0060	0.0033
Mercury	114625-12-20 05:15 G	43587334.59	43587334.72	43587334.87	0.0060	0.0042
Mercury	114626-03-18 06:56 G	43587422.69	43587422.79	43587422.89	0.0060	0.0051
Venus	114636-10-14 08:36 G	43591285.68	43591285.86	43591286.06	0.0063	0.0029
Venus	114637-05-27 11:44 G	43591510.79	43591510.99	43591511.22	0.0063	0.0008
Venus	114638-01-07 14:51 G	43591735.99	43591736.12	43591736.29	0.0063	0.0046

Earth	114644-04-13 05:15 G	43594023.67	43594023.72	43594023.81	0.0066	0.0063
Moon	114644-04-13 06:27 G	43594023.74	43594023.77	43594023.86	0.0066	0.0064 *
Earth	114645-04-14 18:12 G	43594390.03	43594390.26	43594390.51	0.0066	0.0022
Moon	114645-04-14 18:27 G	43594390.06	43594390.27	43594390.52	0.0066	0.0023 *
Mercury	114719-07-15 20:08 G	43621509.31	43621509.34	43621509.39	0.0085	0.0080
Mercury	114719-10-11 21:20 G	43621597.31	43621597.39	43621597.49	0.0085	0.0062
Mercury	114720-01-07 22:46 G	43621685.34	43621685.45	43621685.56	0.0085	0.0044
Mercury	114720-04-04 23:58 G	43621773.38	43621773.50	43621773.63	0.0085	0.0026
Mercury	114720-07-02 01:10 G	43621861.42	43621861.55	43621861.68	0.0085	0.0008
Mercury	114720-09-28 02:22 G	43621949.47	43621949.60	43621949.73	0.0085	0.0010
Mercury	114720-12-25 03:34 G	43622037.53	43622037.65	43622037.78	0.0084	0.0027
Mercury	114721-03-23 04:46 G	43622125.59	43622125.70	43622125.81	0.0084	0.0045
Mercury	114721-06-19 05:44 G	43622213.66	43622213.74	43622213.84	0.0084	0.0062
Mercury	114721-09-15 06:56 G	43622301.76	43622301.79	43622301.84	0.0084	0.0079
Venus	114726-11-28 19:53 G	43624202.22	43624202.33	43624202.47	0.0081	0.0068
Venus	114727-07-12 07:39 G	43624427.61	43624427.82	43624428.05	0.0081	0.0016
Earth	114732-10-14 20:22 G	43626349.14	43626349.35	43626349.60	0.0078	0.0038
Moon	114732-10-15 00:12 G	43626349.28	43626349.51	43626349.75	0.0078	0.0035 *
Mercury	114869-03-23 04:03 G	43676182.60	43676182.67	43676182.79	0.0059	0.0053
Mercury	114869-06-19 05:15 G	43676270.62	43676270.72	43676270.89	0.0059	0.0044
Mercury	114869-09-15 07:10 G	43676358.65	43676358.80	43676358.97	0.0060	0.0034
Mercury	114869-12-12 08:36 G	43676446.69	43676446.86	43676447.05	0.0060	0.0025
Mercury	114870-03-10 10:03 G	43676534.73	43676534.92	43676535.12	0.0060	0.0016
Mercury	114870-06-06 11:29 G	43676622.79	43676622.98	43676623.18	0.0060	0.0006
Mercury	114870-09-02 12:56 G	43676710.84	43676711.04	43676711.24	0.0060	0.0003
Mercury	114870-11-29 14:22 G	43676798.91	43676799.10	43676799.29	0.0060	0.0012
Mercury	114871-02-25 15:20 G	43676886.97	43676887.14	43676887.34	0.0060	0.0022
Mercury	114871-05-24 16:46 G	43676975.05	43676975.20	43676975.39	0.0060	0.0031
Mercury	114871-08-20 18:27 G	43677063.13	43677063.27	43677063.42	0.0060	0.0040
Mercury	114871-11-16 19:24 G	43677151.23	43677151.31	43677151.45	0.0060	0.0050

Mercury	114872-02-12 20:51 G	43677239.36	43677239.37	43677239.43	0.0060	0.0060
Venus	114882-04-02 18:12 G	43680941.11	43680941.26	43680941.42	0.0063	0.0043
Venus	114882-11-13 21:34 G	43681166.18	43681166.40	43681166.62	0.0063	0.0007
Venus	114883-06-27 00:41 G	43681391.35	43681391.53	43681391.73	0.0063	0.0031
Mars	114883-11-26 17:44 G	43681544.04	43681544.24	43681544.50	0.0064	0.0042
Earth	114890-04-16 14:08 G	43683876.92	43683877.09	43683877.27	0.0066	0.0048
Moon	114890-04-16 17:00 G	43683877.05	43683877.21	43683877.40	0.0066	0.0047 *
Moon	114891-04-17 23:15 G	43684243.27	43684243.47	43684243.70	0.0066	0.0035
Earth	114891-04-18 02:36 G	43684243.43	43684243.61	43684243.85	0.0066	0.0037 *
Mercury	114965-03-15 11:29 G	43711237.97	43711237.98	43711238.01	0.0085	0.0084
Mercury	114965-06-11 12:41 G	43711325.96	43711326.03	43711326.12	0.0085	0.0066
Mercury	114965-09-07 14:08 G	43711413.99	43711414.09	43711414.20	0.0085	0.0048
Mercury	114965-12-04 15:20 G	43711502.02	43711502.14	43711502.27	0.0085	0.0030
Mercury	114966-03-02 16:32 G	43711590.06	43711590.19	43711590.32	0.0085	0.0012
Mercury	114966-05-29 17:44 G	43711678.11	43711678.24	43711678.38	0.0085	0.0006
Mercury	114966-08-25 18:56 G	43711766.17	43711766.29	43711766.42	0.0084	0.0023
Mercury	114966-11-21 20:08 G	43711854.23	43711854.34	43711854.46	0.0084	0.0041
Mercury	114967-02-17 21:05 G	43711942.30	43711942.38	43711942.49	0.0084	0.0058
Mercury	114967-05-16 22:17 G	43712030.39	43712030.43	43712030.50	0.0084	0.0076
Venus	114972-12-28 13:10 G	43714082.83	43714083.05	43714083.27	0.0081	0.0018
Venus	114973-08-11 00:12 G	43714308.40	43714308.51	43714308.67	0.0081	0.0065
Earth	114978-10-18 08:22 G	43716202.76	43716202.85	43716203.00	0.0078	0.0069
Moon	114978-10-18 10:32 G	43716202.88	43716202.94	43716203.05	0.0078	0.0073 *

# 116TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 116th millennium CE.

PLANET	MAX-	C	START	MAX	END	SUNRAD	DEPTH	S
TRANSIT								
TIME								
Mercury	115114-11-23	16:32	G	43765911.15	43765911.19	43765911.28	0.0059	0.0056
Mercury	115115-02-19	18:27	G	43765999.15	43765999.27	43765999.39	0.0059	0.0047
Mercury	115115-05-18	19:53	G	43766087.18	43766087.33	43766087.48	0.0059	0.0038
Mercury	115115-08-14	21:05	G	43766175.21	43766175.38	43766175.56	0.0060	0.0029
Mercury	115115-11-10	22:32	G	43766263.26	43766263.44	43766263.63	0.0060	0.0020
Mercury	115116-02-06	23:44	G	43766351.31	43766351.49	43766351.70	0.0060	0.0011
Mercury	115116-05-05	01:24	G	43766439.36	43766439.56	43766439.76	0.0060	0.0001
Mercury	115116-08-01	02:51	G	43766527.42	43766527.62	43766527.82	0.0060	0.0008
Mercury	115116-10-28	04:17	G	43766615.49	43766615.68	43766615.87	0.0060	0.0017
Mercury	115117-01-24	05:15	G	43766703.56	43766703.72	43766703.91	0.0060	0.0027
Mercury	115117-04-22	06:41	G	43766791.64	43766791.78	43766791.95	0.0060	0.0036
Mercury	115117-07-19	08:08	G	43766879.73	43766879.84	43766879.98	0.0060	0.0045
Mercury	115117-10-15	09:20	G	43766967.83	43766967.89	43766967.99	0.0060	0.0055
Venus	115127-09-22	02:22	G	43770596.59	43770596.60	43770596.66	0.0063	0.0062
Venus	115128-05-04	05:58	G	43770821.56	43770821.75	43770821.95	0.0063	0.0025
Venus	115128-12-15	09:05	G	43771046.67	43771046.88	43771047.10	0.0063	0.0012
Venus	115129-07-28	12:27	G	43771271.89	43771272.02	43771272.16	0.0063	0.0049
Mars	115130-04-22	09:05	G	43771539.59	43771539.88	43771540.19	0.0064	0.0010
Moon	115136-04-20	18:56	G	43773730.11	43773730.29	43773730.48	0.0066	0.0042
Earth	115136-04-20	19:53	G	43773730.14	43773730.33	43773730.55	0.0066	0.0040 *
Moon	115137-04-22	07:53	G	43774096.67	43774096.83	43774097.03	0.0066	0.0048
Earth	115137-04-22	08:36	G	43774096.70	43774096.86	43774097.07	0.0066	0.0046 *
Mercury	115211-02-11	03:05	G	43801054.60	43801054.63	43801054.69	0.0085	0.0079
Mercury	115211-05-10	04:32	G	43801142.60	43801142.69	43801142.79	0.0085	0.0061
Mercury	115211-08-06	05:44	G	43801230.63	43801230.74	43801230.86	0.0085	0.0043
Mercury	115211-11-02	07:10	G	43801318.67	43801318.80	43801318.92	0.0085	0.0025

Mercury	115212-01-29 08:22 G	43801406.72	43801406.85	43801406.98	0.0085	0.0008
Mercury	115212-04-26 09:34 G	43801494.77	43801494.90	43801495.03	0.0085	0.0010
Mercury	115212-07-23 10:46 G	43801582.82	43801582.95	43801583.07	0.0084	0.0028
Mercury	115212-10-19 11:44 G	43801670.89	43801670.99	43801671.11	0.0084	0.0045
Mercury	115213-01-15 12:56 G	43801758.96	43801759.04	43801759.13	0.0084	0.0063
Mercury	115213-04-13 13:53 G	43801847.06	43801847.08	43801847.13	0.0084	0.0080
Venus	115218-06-17 14:22 G	43803737.99	43803738.10	43803738.24	0.0081	0.0068
Venus	115219-01-29 02:08 G	43803963.38	43803963.59	43803963.82	0.0081	0.0016
Earth	115223-10-20 11:29 G	43805688.86	43805688.98	43805689.15	0.0079	0.0066
Moon	115223-10-20 15:34 G	43805688.99	43805689.15	43805689.31	0.0079	0.0062 *
Mercury	115360-10-20 07:10 G	43855727.70	43855727.80	43855727.90	0.0059	0.0051
Mercury	115361-01-16 08:22 G	43855815.72	43855815.85	43855816.00	0.0059	0.0042
Mercury	115361-04-14 09:48 G	43855903.75	43855903.91	43855904.08	0.0060	0.0033
Mercury	115361-07-11 11:00 G	43855991.79	43855991.96	43855992.15	0.0060	0.0024
Mercury	115361-10-07 12:27 G	43856079.84	43856080.02	43856080.22	0.0060	0.0015
Mercury	115362-01-03 13:53 G	43856167.89	43856168.08	43856168.29	0.0060	0.0006
Mercury	115362-04-01 15:20 G	43856255.95	43856256.14	43856256.34	0.0060	0.0004
Mercury	115362-06-28 16:46 G	43856344.01	43856344.20	43856344.40	0.0060	0.0013
Mercury	115362-09-24 18:12 G	43856432.08	43856432.26	43856432.45	0.0060	0.0022
Mercury	115362-12-21 19:10 G	43856520.15	43856520.30	43856520.49	0.0060	0.0032
Mercury	115363-03-19 20:36 G	43856608.24	43856608.36	43856608.52	0.0060	0.0041
Mercury	115363-06-15 22:03 G	43856696.33	43856696.42	43856696.54	0.0060	0.0051
Mercury	115363-09-11 23:29 G	43856784.48	43856784.48	43856784.52	0.0060	0.0060
Venus	115373-10-21 14:08 G	43860476.96	43860477.09	43860477.27	0.0063	0.0044
Venus	115374-06-03 17:44 G	43860702.03	43860702.24	43860702.46	0.0063	0.0007
Venus	115375-01-14 20:36 G	43860927.19	43860927.36	43860927.57	0.0063	0.0031
Mars	115376-09-14 00:12 G	43861535.24	43861535.51	43861535.81	0.0064	0.0024
Moon	115382-04-23 23:58 G	43863583.29	43863583.50	43863583.76	0.0066	0.0030
Earth	115382-04-24 02:08 G	43863583.39	43863583.59	43863583.84	0.0066	0.0031 *
Earth	115383-04-25 15:05 G	43863950.01	43863950.13	43863950.29	0.0066	0.0056

Moon	115383-04-25 18:27 G	43863950.15	43863950.27	43863950.44	0.0066	0.0054	*
Mercury	115457-01-08 19:10 G	43890871.24	43890871.30	43890871.38	0.0085	0.0070	
Mercury	115457-04-06 20:22 G	43890959.26	43890959.35	43890959.47	0.0085	0.0052	
Mercury	115457-07-03 21:48 G	43891047.29	43891047.41	43891047.53	0.0085	0.0034	
Mercury	115457-09-29 23:00 G	43891135.33	43891135.46	43891135.59	0.0085	0.0016	
Mercury	115457-12-27 00:12 G	43891223.38	43891223.51	43891223.64	0.0085	0.0002	
Mercury	115458-03-25 01:24 G	43891311.44	43891311.56	43891311.69	0.0084	0.0019	
Mercury	115458-06-21 02:36 G	43891399.50	43891399.61	43891399.73	0.0084	0.0037	
Mercury	115458-09-17 03:34 G	43891487.56	43891487.65	43891487.76	0.0084	0.0054	
Mercury	115458-12-14 04:46 G	43891575.64	43891575.70	43891575.78	0.0084	0.0072	
Venus	115464-07-18 05:29 G	43893618.53	43893618.73	43893618.96	0.0081	0.0028	
Venus	115465-02-28 17:00 G	43893844.06	43893844.21	43893844.39	0.0081	0.0055	
Mars	115465-12-01 15:48 G	43894119.86	43894120.16	43894120.49	0.0081	0.0018	
Moon	115469-10-23 18:41 G	43895542.09	43895542.28	43895542.50	0.0078	0.0047	
Earth	115469-10-23 21:20 G	43895542.18	43895542.39	43895542.62	0.0078	0.0044	*
Mercury	115606-06-21 18:56 G	43945456.25	43945456.29	43945456.36	0.0059	0.0057	
Mercury	115606-09-17 20:22 G	43945544.24	43945544.35	43945544.48	0.0059	0.0048	
Mercury	115606-12-14 21:34 G	43945632.27	43945632.40	43945632.57	0.0059	0.0039	
Mercury	115607-03-12 23:00 G	43945720.30	43945720.46	43945720.65	0.0059	0.0030	
Mercury	115607-06-09 00:27 G	43945808.35	43945808.52	43945808.72	0.0060	0.0021	
Mercury	115607-09-05 01:53 G	43945896.40	43945896.58	43945896.79	0.0060	0.0012	
Mercury	115607-12-02 03:34 G	43945984.45	43945984.65	43945984.85	0.0060	0.0002	
Mercury	115608-02-28 05:00 G	43946072.51	43946072.71	43946072.90	0.0060	0.0007	
Mercury	115608-05-26 06:12 G	43946160.58	43946160.76	43946160.96	0.0060	0.0016	
Mercury	115608-08-22 07:24 G	43946248.65	43946248.81	43946249.00	0.0060	0.0026	
Mercury	115608-11-18 08:36 G	43946336.72	43946336.86	43946337.04	0.0060	0.0035	
Mercury	115609-02-14 10:03 G	43946424.81	43946424.92	43946425.08	0.0060	0.0044	
Mercury	115609-05-13 11:44 G	43946512.91	43946512.99	43946513.09	0.0060	0.0053	
Venus	115619-11-22 00:56 G	43950357.37	43950357.54	43950357.75	0.0063	0.0029	
Venus	115620-07-04 04:17 G	43950582.48	43950582.68	43950582.91	0.0063	0.0009	

Venus	115621-02-14 07:24 G	43950807.68	43950807.81	43950807.99	0.0063	0.0045
Mars	115623-02-07 11:44 G	43951530.84	43951530.99	43951531.20	0.0064	0.0051
Earth	115628-04-27 06:41 G	43953436.56	43953436.78	43953437.03	0.0066	0.0026
Moon	115628-04-27 10:03 G	43953436.70	43953436.92	43953437.17	0.0066	0.0026 *
Moon	115629-04-28 17:29 G	43953803.14	43953803.23	43953803.34	0.0066	0.0061
Earth	115629-04-28 19:10 G	43953803.23	43953803.30	43953803.44	0.0066	0.0061 *
Mercury	115702-12-07 10:17 G	43980687.87	43980687.93	43980688.02	0.0085	0.0069
Mercury	115703-03-05 11:44 G	43980775.89	43980775.99	43980776.10	0.0085	0.0051
Mercury	115703-06-01 12:56 G	43980863.92	43980864.04	43980864.17	0.0085	0.0033
Mercury	115703-08-28 14:08 G	43980951.97	43980952.09	43980952.23	0.0085	0.0016
Mercury	115703-11-24 15:34 G	43981040.01	43981040.15	43981040.28	0.0085	0.0003
Mercury	115704-02-20 16:46 G	43981128.07	43981128.20	43981128.32	0.0085	0.0020
Mercury	115704-05-18 17:44 G	43981216.13	43981216.24	43981216.36	0.0084	0.0037
Mercury	115704-08-14 18:56 G	43981304.20	43981304.29	43981304.40	0.0084	0.0055
Mercury	115704-11-10 20:22 G	43981392.28	43981392.35	43981392.41	0.0084	0.0072
Venus	115710-08-18 17:29 G	43983499.01	43983499.23	43983499.46	0.0081	0.0002
Venus	115711-04-01 04:32 G	43983724.68	43983724.69	43983724.75	0.0081	0.0080
Mars	115712-04-26 16:17 G	43984115.97	43984116.18	43984116.46	0.0080	0.0052
Moon	115715-10-27 23:44 G	43985395.27	43985395.49	43985395.75	0.0078	0.0037
Earth	115715-10-28 01:39 G	43985395.34	43985395.57	43985395.80	0.0078	0.0038 *
Mercury	115852-05-19 08:08 G	44035272.78	44035272.84	44035272.93	0.0059	0.0055
Mercury	115852-08-15 09:20 G	44035360.78	44035360.89	44035361.03	0.0059	0.0046
Mercury	115852-11-11 10:46 G	44035448.81	44035448.95	44035449.12	0.0059	0.0037
Mercury	115853-02-07 12:12 G	44035536.85	44035537.01	44035537.20	0.0059	0.0028
Mercury	115853-05-06 13:39 G	44035624.89	44035625.07	44035625.27	0.0060	0.0019
Mercury	115853-08-02 15:05 G	44035712.94	44035713.13	44035713.33	0.0060	0.0010
Mercury	115853-10-29 16:46 G	44035801.00	44035801.20	44035801.40	0.0060	0.0001
Mercury	115854-01-25 17:58 G	44035889.06	44035889.25	44035889.45	0.0060	0.0009
Mercury	115854-04-23 19:24 G	44035977.12	44035977.31	44035977.50	0.0060	0.0018
Mercury	115854-07-20 20:22 G	44036065.20	44036065.35	44036065.55	0.0060	0.0028



Mercury	115854-10-16 21:48 G	44036153.28	44036153.41	44036153.59	0.0060	0.0037
Mercury	115855-01-12 23:15 G	44036241.37	44036241.47	44036241.62	0.0060	0.0046
Mercury	115855-04-11 00:56 G	44036329.48	44036329.54	44036329.62	0.0060	0.0055
Venus	115865-05-11 08:08 G	44040012.74	44040012.84	44040012.98	0.0063	0.0052
Venus	115865-12-22 11:44 G	44040237.79	44040237.99	44040238.21	0.0063	0.0015
Venus	115866-08-04 14:51 G	44040462.93	44040463.12	44040463.33	0.0063	0.0022
Venus	115867-03-17 18:12 G	44040688.19	44040688.26	44040688.35	0.0063	0.0059
Moon	115874-05-01 09:48 G	44043289.70	44043289.91	44043290.16	0.0066	0.0024
Earth	115874-05-01 11:00 G	44043289.72	44043289.96	44043290.21	0.0066	0.0022 *
Moon	115875-05-02 21:34 G	44043656.37	44043656.40	44043656.49	0.0066	0.0065
Earth	115875-05-02 23:15 G	44043656.44	44043656.47	44043656.56	0.0066	0.0065 *
Mercury	115948-08-08 00:41 G	44070416.51	44070416.53	44070416.56	0.0085	0.0083
Mercury	115948-11-04 01:53 G	44070504.51	44070504.58	44070504.67	0.0085	0.0065
Mercury	115949-01-31 03:20 G	44070592.53	44070592.64	44070592.75	0.0085	0.0047
Mercury	115949-04-29 04:17 G	44070680.57	44070680.68	44070680.81	0.0085	0.0030
Mercury	115949-07-26 05:44 G	44070768.61	44070768.74	44070768.87	0.0085	0.0012
Mercury	115949-10-22 06:56 G	44070856.66	44070856.79	44070856.92	0.0085	0.0006
Mercury	115950-01-18 08:08 G	44070944.71	44070944.84	44070944.97	0.0085	0.0023
Mercury	115950-04-16 09:20 G	44071032.78	44071032.89	44071033.01	0.0084	0.0040
Mercury	115950-07-13 10:32 G	44071120.85	44071120.94	44071121.03	0.0084	0.0058
Mercury	115950-10-09 11:29 G	44071208.93	44071208.98	44071209.05	0.0084	0.0075
Venus	115956-02-05 18:12 G	44073154.10	44073154.26	44073154.44	0.0081	0.0054
Venus	115956-09-18 05:44 G	44073379.55	44073379.74	44073379.97	0.0081	0.0029
Earth	115961-10-31 07:53 G	44075248.59	44075248.83	44075249.08	0.0078	0.0026
Moon	115961-10-31 11:29 G	44075248.75	44075248.98	44075249.24	0.0078	0.0027 *

# 117TH MILLENNIUM CE

**This is a list of transits visible from Pluto in the 117th millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	116098-04-15 20:51	G	44125089.31	44125089.37	44125089.46	0.0059	0.0055	
Mercury	116098-07-12 22:17	G	44125177.31	44125177.43	44125177.56	0.0059	0.0046	
Mercury	116098-10-08 23:44	G	44125265.34	44125265.49	44125265.65	0.0059	0.0037	
Mercury	116099-01-05 00:56	G	44125353.38	44125353.54	44125353.73	0.0059	0.0028	
Mercury	116099-04-03 02:22	G	44125441.42	44125441.60	44125441.80	0.0060	0.0019	
Mercury	116099-06-30 03:48	G	44125529.47	44125529.66	44125529.87	0.0060	0.0010	
Mercury	116099-09-26 05:29	G	44125617.53	44125617.73	44125617.93	0.0060	0.0001	
Mercury	116099-12-23 06:41	G	44125705.59	44125705.78	44125705.98	0.0060	0.0009	
Mercury	116100-03-21 08:08	G	44125793.65	44125793.84	44125794.03	0.0060	0.0018	
Mercury	116100-06-17 09:20	G	44125881.73	44125881.89	44125882.08	0.0060	0.0027	
Mercury	116100-09-13 11:00	G	44125969.80	44125969.96	44125970.12	0.0060	0.0036	
Mercury	116100-12-10 11:44	G	44126057.89	44126057.99	44126058.15	0.0060	0.0046	
Mercury	116101-03-08 13:24	G	44126146.00	44126146.06	44126146.16	0.0060	0.0055	
Venus	116111-06-11 17:15	G	44129893.09	44129893.22	44129893.40	0.0063	0.0043	
Venus	116112-01-22 21:05	G	44130118.16	44130118.38	44130118.59	0.0063	0.0006	
Venus	116112-09-04 00:12	G	44130343.32	44130343.51	44130343.70	0.0063	0.0031	
Moon	116120-05-04 09:05	G	44133142.65	44133142.88	44133143.14	0.0066	0.0024	
Earth	116120-05-04 12:27	G	44133142.80	44133143.02	44133143.27	0.0066	0.0025	*
Earth	116121-05-06 01:24	G	44133509.48	44133509.56	44133509.67	0.0066	0.0062	
Moon	116121-05-06 04:32	G	44133509.61	44133509.69	44133509.82	0.0066	0.0061	*
Mercury	116194-10-01 16:17	G	44160321.12	44160321.18	44160321.27	0.0085	0.0070	
Mercury	116194-12-28 17:44	G	44160409.14	44160409.24	44160409.35	0.0085	0.0052	

Mercury	116195-03-26 18:56 G	44160497.18	44160497.29	44160497.42	0.0085	0.0035
Mercury	116195-06-22 20:08 G	44160585.22	44160585.34	44160585.48	0.0085	0.0017
Mercury	116195-09-18 21:34 G	44160673.26	44160673.40	44160673.53	0.0085	0.0002
Mercury	116195-12-15 22:32 G	44160761.32	44160761.44	44160761.58	0.0085	0.0019
Mercury	116196-03-12 23:44 G	44160849.38	44160849.49	44160849.62	0.0084	0.0036
Mercury	116196-06-09 00:56 G	44160937.45	44160937.54	44160937.65	0.0084	0.0053
Mercury	116196-09-05 02:08 G	44161025.53	44161025.59	44161025.67	0.0084	0.0070
Venus	116202-03-08 03:20 G	44163034.46	44163034.64	44163034.85	0.0081	0.0040
Venus	116202-10-19 15:05 G	44163259.94	44163260.13	44163260.32	0.0081	0.0042
Moon	116207-11-04 06:41 G	44165101.57	44165101.78	44165102.04	0.0078	0.0034
Earth	116207-11-04 08:08 G	44165101.62	44165101.84	44165102.10	0.0078	0.0033 *
Mercury	116344-03-14 08:51 G	44214905.84	44214905.87	44214905.93	0.0059	0.0057
Mercury	116344-06-10 10:17 G	44214993.83	44214993.93	44214994.06	0.0059	0.0049
Mercury	116344-09-06 11:44 G	44215081.85	44215081.99	44215082.15	0.0059	0.0040
Mercury	116344-12-03 13:10 G	44215169.89	44215170.05	44215170.23	0.0059	0.0031
Mercury	116345-03-01 14:36 G	44215257.93	44215258.11	44215258.30	0.0059	0.0022
Mercury	116345-05-28 16:03 G	44215345.98	44215346.17	44215346.37	0.0060	0.0013
Mercury	116345-08-24 17:29 G	44215434.03	44215434.23	44215434.43	0.0060	0.0004
Mercury	116345-11-20 18:41 G	44215522.09	44215522.28	44215522.49	0.0060	0.0006
Mercury	116346-02-16 20:08 G	44215610.15	44215610.34	44215610.54	0.0060	0.0015
Mercury	116346-05-15 21:20 G	44215698.22	44215698.39	44215698.59	0.0060	0.0024
Mercury	116346-08-11 22:46 G	44215786.30	44215786.45	44215786.63	0.0060	0.0033
Mercury	116346-11-08 00:12 G	44215874.38	44215874.51	44215874.66	0.0060	0.0042
Mercury	116347-02-04 01:10 G	44215962.48	44215962.55	44215962.68	0.0060	0.0052
Venus	116357-07-12 01:53 G	44219773.41	44219773.58	44219773.76	0.0063	0.0037
Venus	116358-02-22 05:15 G	44219998.51	44219998.72	44219998.94	0.0063	0.0001
Venus	116358-10-05 07:53 G	44220223.68	44220223.83	44220224.04	0.0063	0.0037
Earth	116366-05-08 11:58 G	44222995.80	44222996.00	44222996.24	0.0066	0.0033
Moon	116366-05-08 14:51 G	44222995.93	44222996.12	44222996.36	0.0066	0.0036 *
Moon	116367-05-10 00:27 G	44223362.40	44223362.52	44223362.66	0.0066	0.0056

Earth	116367-05-10 01:39 G	44223362.42	44223362.57	44223362.72	0.0066	0.0054	*
Mercury	116440-08-29 06:56 G	44250137.74	44250137.79	44250137.85	0.0085	0.0076	
Mercury	116440-11-25 07:53 G	44250225.75	44250225.83	44250225.94	0.0085	0.0059	
Mercury	116441-02-21 09:20 G	44250313.78	44250313.89	44250314.01	0.0085	0.0041	
Mercury	116441-05-20 10:32 G	44250401.82	44250401.94	44250402.07	0.0085	0.0023	
Mercury	116441-08-16 11:44 G	44250489.86	44250489.99	44250490.13	0.0085	0.0006	
Mercury	116441-11-12 12:56 G	44250577.91	44250578.04	44250578.18	0.0085	0.0012	
Mercury	116442-02-08 14:08 G	44250665.97	44250666.09	44250666.22	0.0084	0.0029	
Mercury	116442-05-07 15:20 G	44250754.04	44250754.14	44250754.25	0.0084	0.0047	
Mercury	116442-08-03 16:32 G	44250842.11	44250842.19	44250842.28	0.0084	0.0064	
Mercury	116442-10-30 17:29 G	44250930.21	44250930.23	44250930.28	0.0084	0.0081	
Venus	116448-04-06 11:58 G	44252914.80	44252915.00	44252915.22	0.0081	0.0028	
Venus	116448-11-17 23:29 G	44253140.32	44253140.48	44253140.66	0.0081	0.0054	
Moon	116453-11-06 04:32 G	44254954.48	44254954.69	44254954.95	0.0078	0.0039	
Earth	116453-11-06 07:39 G	44254954.61	44254954.82	44254955.07	0.0078	0.0040	*
Mercury	116590-05-07 21:48 G	44304810.33	44304810.41	44304810.50	0.0059	0.0054	
Mercury	116590-08-03 23:15 G	44304898.34	44304898.47	44304898.60	0.0059	0.0045	
Mercury	116590-10-30 23:58 G	44304986.37	44304986.50	44304986.69	0.0059	0.0037	
Mercury	116591-01-27 01:39 G	44305074.41	44305074.57	44305074.76	0.0059	0.0027	
Mercury	116591-04-25 03:05 G	44305162.46	44305162.63	44305162.83	0.0059	0.0018	
Mercury	116591-07-22 04:46 G	44305250.51	44305250.70	44305250.90	0.0059	0.0009	
Mercury	116591-10-18 06:12 G	44305338.56	44305338.76	44305338.96	0.0060	0.0000	
Mercury	116592-01-14 07:24 G	44305426.62	44305426.81	44305427.01	0.0060	0.0009	
Mercury	116592-04-11 08:36 G	44305514.69	44305514.86	44305515.07	0.0060	0.0019	
Mercury	116592-07-08 10:03 G	44305602.76	44305602.92	44305603.11	0.0060	0.0028	
Mercury	116592-10-04 11:15 G	44305690.84	44305690.97	44305691.15	0.0060	0.0037	
Mercury	116592-12-31 12:41 G	44305778.93	44305779.03	44305779.18	0.0060	0.0046	
Mercury	116593-03-29 14:08 G	44305867.04	44305867.09	44305867.19	0.0060	0.0055	
Venus	116603-08-12 08:22 G	44309653.69	44309653.85	44309654.04	0.0063	0.0037	
Venus	116604-03-24 11:58 G	44309878.78	44309879.00	44309879.22	0.0063	0.0001	

Venus	116604-11-04 14:36 G	44310103.95	44310104.11	44310104.31	0.0063	0.0036
Earth	116612-05-11 08:08 G	44312848.70	44312848.84	44312849.05	0.0066	0.0049
Moon	116612-05-11 09:34 G	44312848.74	44312848.90	44312849.10	0.0066	0.0046 *
Moon	116613-05-12 19:10 G	44313215.09	44313215.30	44313215.53	0.0066	0.0035
Earth	116613-05-12 21:20 G	44313215.20	44313215.39	44313215.62	0.0066	0.0038 *
Mercury	116686-10-23 21:05 G	44340042.33	44340042.38	44340042.44	0.0085	0.0077
Mercury	116687-01-19 22:17 G	44340130.34	44340130.43	44340130.53	0.0085	0.0059
Mercury	116687-04-17 23:29 G	44340218.37	44340218.48	44340218.60	0.0085	0.0041
Mercury	116687-07-15 00:41 G	44340306.41	44340306.53	44340306.66	0.0085	0.0024
Mercury	116687-10-11 02:08 G	44340394.46	44340394.59	44340394.72	0.0085	0.0006
Mercury	116688-01-07 03:20 G	44340482.51	44340482.64	44340482.77	0.0085	0.0012
Mercury	116688-04-04 04:32 G	44340570.56	44340570.69	44340570.81	0.0084	0.0029
Mercury	116688-07-01 05:29 G	44340658.63	44340658.73	44340658.85	0.0084	0.0047
Mercury	116688-09-27 06:41 G	44340746.70	44340746.78	44340746.87	0.0084	0.0064
Mercury	116688-12-24 07:53 G	44340834.80	44340834.83	44340834.87	0.0084	0.0081
Venus	116694-05-07 16:03 G	44342794.97	44342795.17	44342795.37	0.0081	0.0036
Venus	116694-12-19 03:05 G	44343020.47	44343020.63	44343020.84	0.0081	0.0046
Earth	116699-11-10 00:12 G	44344807.41	44344807.51	44344807.64	0.0078	0.0070
Moon	116699-11-10 03:48 G	44344807.57	44344807.66	44344807.77	0.0078	0.0073 *
Mercury	116836-07-01 09:34 G	44394714.83	44394714.90	44394715.00	0.0059	0.0054
Mercury	116836-09-27 11:00 G	44394802.84	44394802.96	44394803.10	0.0059	0.0045
Mercury	116836-12-24 12:27 G	44394890.87	44394891.02	44394891.19	0.0059	0.0036
Mercury	116837-03-22 14:08 G	44394978.91	44394979.09	44394979.26	0.0059	0.0027
Mercury	116837-06-18 15:20 G	44395066.96	44395067.14	44395067.33	0.0059	0.0018
Mercury	116837-09-14 16:46 G	44395155.01	44395155.20	44395155.40	0.0059	0.0009
Mercury	116837-12-11 18:12 G	44395243.06	44395243.26	44395243.46	0.0060	0.0000
Mercury	116838-03-09 19:24 G	44395331.12	44395331.31	44395331.51	0.0060	0.0009
Mercury	116838-06-05 20:36 G	44395419.19	44395419.36	44395419.57	0.0060	0.0019
Mercury	116838-09-01 22:03 G	44395507.26	44395507.42	44395507.61	0.0060	0.0028
Mercury	116838-11-28 23:15 G	44395595.34	44395595.47	44395595.65	0.0060	0.0037

Mercury	116839-02-25 00:41 G	44395683.43	44395683.53	44395683.68	0.0060	0.0046
Mercury	116839-05-24 02:08 G	44395771.53	44395771.59	44395771.69	0.0060	0.0055
Venus	116849-09-10 13:53 G	44399533.92	44399534.08	44399534.24	0.0063	0.0041
Venus	116850-04-23 17:00 G	44399758.99	44399759.21	44399759.43	0.0063	0.0005
Venus	116850-12-04 19:53 G	44399984.15	44399984.33	44399984.53	0.0063	0.0031
Earth	116859-05-15 16:17 G	44403067.94	44403068.18	44403068.44	0.0066	0.0017
Moon	116859-05-15 19:39 G	44403068.09	44403068.32	44403068.58	0.0066	0.0020 *
Mercury	116932-12-17 11:00 G	44429946.93	44429946.96	44429947.02	0.0085	0.0079
Mercury	116933-03-15 12:27 G	44430034.93	44430035.02	44430035.11	0.0085	0.0061
Mercury	116933-06-11 13:24 G	44430122.96	44430123.06	44430123.19	0.0085	0.0044
Mercury	116933-09-07 14:51 G	44430211.00	44430211.12	44430211.25	0.0085	0.0026
Mercury	116933-12-04 16:03 G	44430299.04	44430299.17	44430299.31	0.0085	0.0009
Mercury	116934-03-02 17:15 G	44430387.10	44430387.22	44430387.36	0.0085	0.0010
Mercury	116934-05-29 18:27 G	44430475.15	44430475.27	44430475.40	0.0085	0.0027
Mercury	116934-08-25 19:39 G	44430563.21	44430563.32	44430563.44	0.0084	0.0044
Mercury	116934-11-21 20:36 G	44430651.29	44430651.36	44430651.47	0.0084	0.0062
Mercury	116935-02-17 21:48 G	44430739.38	44430739.41	44430739.47	0.0084	0.0078
Venus	116940-06-06 18:27 G	44432675.11	44432675.27	44432675.46	0.0081	0.0050
Venus	116941-01-18 06:27 G	44432900.56	44432900.77	44432900.98	0.0081	0.0033
Moon	116946-11-14 19:24 G	44435027.08	44435027.31	44435027.54	0.0078	0.0041
Earth	116946-11-14 19:39 G	44435027.13	44435027.32	44435027.55	0.0078	0.0045 *

# 118TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 118th millennium CE.

PLANET	MAX-	C	START	MAX	END	SUNRAD	DEPTH	S
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TRANSIT

TIME

Mercury	117082-08-25 21:20 G	44484619.33	44484619.39	44484619.48	0.0059	0.0055
Mercury	117082-11-21 22:46 G	44484707.34	44484707.45	44484707.58	0.0059	0.0046
Mercury	117083-02-17 23:44 G	44484795.36	44484795.49	44484795.67	0.0059	0.0038
Mercury	117083-05-17 01:10 G	44484883.40	44484883.55	44484883.75	0.0059	0.0029
Mercury	117083-08-13 02:51 G	44484971.44	44484971.62	44484971.82	0.0059	0.0019
Mercury	117083-11-09 04:17 G	44485059.49	44485059.68	44485059.88	0.0059	0.0010
Mercury	117084-02-05 05:44 G	44485147.55	44485147.74	44485147.94	0.0059	0.0002
Mercury	117084-05-03 07:10 G	44485235.61	44485235.80	44485236.00	0.0060	0.0008
Mercury	117084-07-30 08:36 G	44485323.67	44485323.86	44485324.05	0.0060	0.0017
Mercury	117084-10-26 09:48 G	44485411.74	44485411.91	44485412.10	0.0060	0.0026
Mercury	117085-01-22 11:15 G	44485499.82	44485499.97	44485500.14	0.0060	0.0035
Mercury	117085-04-20 12:41 G	44485587.90	44485588.03	44485588.17	0.0060	0.0044
Mercury	117085-07-17 13:24 G	44485676.01	44485676.06	44485676.18	0.0060	0.0054
Venus	117095-10-11 18:27 G	44489414.14	44489414.27	44489414.42	0.0063	0.0048
Venus	117096-05-23 21:48 G	44489639.19	44489639.41	44489639.62	0.0063	0.0012
Venus	117097-01-04 00:27 G	44489864.34	44489864.52	44489864.74	0.0063	0.0024
Venus	117097-08-17 03:48 G	44490089.61	44490089.66	44490089.73	0.0063	0.0061
Moon	117105-05-19 08:22 G	44492920.61	44492920.85	44492921.10	0.0066	0.0012
Earth	117105-05-19 09:48 G	44492920.67	44492920.91	44492921.17	0.0066	0.0009 *
Mercury	117179-05-10 01:24 G	44519939.50	44519939.56	44519939.65	0.0085	0.0071
Mercury	117179-08-06 02:51 G	44520027.53	44520027.62	44520027.73	0.0085	0.0053
Mercury	117179-11-02 04:17 G	44520115.56	44520115.68	44520115.80	0.0085	0.0035
Mercury	117180-01-29 05:29 G	44520203.60	44520203.73	44520203.86	0.0085	0.0018
Mercury	117180-04-26 06:41 G	44520291.65	44520291.78	44520291.91	0.0085	0.0000
Mercury	117180-07-23 07:53 G	44520379.70	44520379.83	44520379.96	0.0085	0.0017
Mercury	117180-10-19 08:51 G	44520467.76	44520467.87	44520468.00	0.0084	0.0035
Mercury	117181-01-15 10:17 G	44520555.83	44520555.93	44520556.03	0.0084	0.0051
Mercury	117181-04-13 11:29 G	44520643.91	44520643.98	44520644.05	0.0084	0.0069

Venus	117186-07-07 17:44 G	44522555.19	44522555.24	44522555.35	0.0082	0.0077
Venus	117187-02-18 05:58 G	44522780.53	44522780.75	44522780.98	0.0081	0.0006
Earth	117192-11-17 06:27 G	44524879.51	44524879.77	44524880.04	0.0078	0.0006
Moon	117192-11-17 10:03 G	44524879.66	44524879.92	44524880.18	0.0078	0.0002 *
Mercury	117328-10-19 08:22 G	44574523.84	44574523.85	44574523.89	0.0059	0.0059
Mercury	117329-01-15 10:03 G	44574611.82	44574611.92	44574612.03	0.0059	0.0050
Mercury	117329-04-13 11:00 G	44574699.84	44574699.96	44574700.12	0.0059	0.0041
Mercury	117329-07-10 12:27 G	44574787.87	44574788.02	44574788.20	0.0059	0.0032
Mercury	117329-10-06 13:53 G	44574875.91	44574876.08	44574876.27	0.0059	0.0024
Mercury	117330-01-02 15:20 G	44574963.96	44574964.14	44574964.34	0.0059	0.0015
Mercury	117330-03-31 16:46 G	44575052.01	44575052.20	44575052.40	0.0059	0.0006
Mercury	117330-06-27 18:12 G	44575140.07	44575140.26	44575140.46	0.0059	0.0004
Mercury	117330-09-23 19:24 G	44575228.13	44575228.31	44575228.52	0.0060	0.0013
Mercury	117330-12-20 20:51 G	44575316.20	44575316.37	44575316.57	0.0060	0.0022
Mercury	117331-03-18 22:03 G	44575404.27	44575404.42	44575404.61	0.0060	0.0031
Mercury	117331-06-14 23:29 G	44575492.35	44575492.48	44575492.64	0.0060	0.0040
Mercury	117331-09-11 00:41 G	44575580.44	44575580.53	44575580.67	0.0060	0.0049
Mercury	117331-12-08 02:08 G	44575668.57	44575668.59	44575668.66	0.0060	0.0058
Venus	117341-11-10 21:34 G	44579294.36	44579294.40	44579294.49	0.0063	0.0060
Venus	117342-06-24 00:56 G	44579519.35	44579519.54	44579519.75	0.0063	0.0024
Venus	117343-02-04 04:17 G	44579744.48	44579744.68	44579744.90	0.0063	0.0012
Venus	117343-09-17 07:24 G	44579969.68	44579969.81	44579969.96	0.0063	0.0049
Moon	117351-05-21 23:00 G	44582773.25	44582773.46	44582773.68	0.0066	0.0037
Earth	117351-05-22 00:56 G	44582773.35	44582773.54	44582773.75	0.0066	0.0040 *
Earth	117352-05-22 13:24 G	44583139.91	44583140.06	44583140.27	0.0066	0.0048
Moon	117352-05-22 16:17 G	44583140.02	44583140.18	44583140.40	0.0066	0.0045 *
Mercury	117425-07-03 14:36 G	44609844.09	44609844.11	44609844.16	0.0085	0.0081
Mercury	117425-09-29 16:03 G	44609932.09	44609932.17	44609932.26	0.0085	0.0063
Mercury	117425-12-26 17:15 G	44610020.11	44610020.22	44610020.34	0.0085	0.0046
Mercury	117426-03-24 18:41 G	44610108.15	44610108.28	44610108.40	0.0085	0.0028



Mercury	117426-06-20 19:53 G	44610196.20	44610196.33	44610196.46	0.0085	0.0011
Mercury	117426-09-16 21:05 G	44610284.25	44610284.38	44610284.51	0.0085	0.0007
Mercury	117426-12-13 22:03 G	44610372.30	44610372.42	44610372.56	0.0085	0.0025
Mercury	117427-03-11 23:15 G	44610460.37	44610460.47	44610460.59	0.0084	0.0042
Mercury	117427-06-08 00:27 G	44610548.44	44610548.52	44610548.62	0.0084	0.0059
Mercury	117427-09-04 01:39 G	44610636.52	44610636.57	44610636.64	0.0084	0.0076
Venus	117433-03-20 05:44 G	44612660.53	44612660.74	44612660.97	0.0081	0.0022
Venus	117433-10-31 17:00 G	44612886.08	44612886.21	44612886.38	0.0081	0.0059
Moon	117438-11-20 13:24 G	44614731.91	44614732.06	44614732.24	0.0078	0.0061
Earth	117438-11-20 16:17 G	44614732.03	44614732.18	44614732.39	0.0078	0.0057 *
Mercury	117575-03-11 20:22 G	44664516.30	44664516.35	44664516.43	0.0059	0.0055
Mercury	117575-06-07 21:20 G	44664604.30	44664604.39	44664604.54	0.0059	0.0047
Mercury	117575-09-03 22:46 G	44664692.32	44664692.45	44664692.63	0.0059	0.0039
Mercury	117575-12-01 00:27 G	44664780.36	44664780.52	44664780.70	0.0059	0.0029
Mercury	117576-02-27 01:53 G	44664868.40	44664868.58	44664868.78	0.0059	0.0021
Mercury	117576-05-25 03:20 G	44664956.45	44664956.64	44664956.84	0.0059	0.0012
Mercury	117576-08-21 04:46 G	44665044.51	44665044.70	44665044.90	0.0059	0.0003
Mercury	117576-11-17 06:12 G	44665132.56	44665132.76	44665132.96	0.0059	0.0006
Mercury	117577-02-13 07:24 G	44665220.63	44665220.81	44665221.01	0.0060	0.0016
Mercury	117577-05-12 08:36 G	44665308.70	44665308.86	44665309.06	0.0060	0.0025
Mercury	117577-08-08 10:03 G	44665396.77	44665396.92	44665397.10	0.0060	0.0034
Mercury	117577-11-04 11:15 G	44665484.86	44665484.97	44665485.13	0.0060	0.0043
Mercury	117578-01-31 12:41 G	44665572.96	44665573.03	44665573.15	0.0060	0.0052
Venus	117588-07-24 03:05 G	44669399.48	44669399.63	44669399.82	0.0063	0.0039
Venus	117589-03-06 06:56 G	44669624.57	44669624.79	44669625.01	0.0063	0.0003
Venus	117589-10-17 10:03 G	44669849.74	44669849.92	44669850.11	0.0063	0.0034
Mars	117594-04-14 22:46 G	44671490.31	44671490.45	44671490.64	0.0065	0.0055
Moon	117598-05-25 23:58 G	44672992.27	44672992.50	44672992.76	0.0066	0.0013
Earth	117598-05-26 03:20 G	44672992.39	44672992.64	44672992.90	0.0066	0.0010 *
Mercury	117671-11-23 04:17 G	44699836.65	44699836.68	44699836.73	0.0085	0.0081

Mercury	117672-02-19 05:29 G	44699924.65	44699924.73	44699924.83	0.0085	0.0063
Mercury	117672-05-17 06:56 G	44700012.68	44700012.79	44700012.90	0.0085	0.0045
Mercury	117672-08-13 08:08 G	44700100.72	44700100.84	44700100.97	0.0085	0.0028
Mercury	117672-11-09 09:20 G	44700188.76	44700188.89	44700189.03	0.0085	0.0011
Mercury	117673-02-05 10:32 G	44700276.81	44700276.94	44700277.08	0.0085	0.0008
Mercury	117673-05-04 11:44 G	44700364.87	44700364.99	44700365.12	0.0085	0.0024
Mercury	117673-07-31 12:56 G	44700452.93	44700453.04	44700453.16	0.0084	0.0042
Mercury	117673-10-27 14:08 G	44700541.00	44700541.09	44700541.19	0.0084	0.0059
Mercury	117674-01-23 15:20 G	44700629.09	44700629.14	44700629.20	0.0084	0.0075
Venus	117679-04-19 02:08 G	44702540.47	44702540.59	44702540.75	0.0082	0.0064
Venus	117679-11-30 14:08 G	44702765.88	44702766.09	44702766.32	0.0081	0.0018
Earth	117685-11-24 02:08 G	44704951.36	44704951.59	44704951.85	0.0078	0.0027
Moon	117685-11-24 03:34 G	44704951.42	44704951.65	44704951.91	0.0078	0.0024 *
Mercury	117821-08-01 07:10 G	44754508.77	44754508.80	44754508.85	0.0059	0.0058
Mercury	117821-10-28 08:07 G	44754596.75	44754596.84	44754596.97	0.0059	0.0049
Mercury	117822-01-24 09:34 G	44754684.78	44754684.90	44754685.07	0.0059	0.0041
Mercury	117822-04-22 11:15 G	44754772.81	44754772.97	44754773.15	0.0059	0.0031
Mercury	117822-07-19 12:41 G	44754860.85	44754861.03	44754861.22	0.0059	0.0023
Mercury	117822-10-15 14:07 G	44754948.90	44754949.09	44754949.29	0.0059	0.0014
Mercury	117823-01-11 15:34 G	44755036.95	44755037.15	44755037.35	0.0059	0.0005
Mercury	117823-04-09 16:46 G	44755125.01	44755125.20	44755125.41	0.0059	0.0005
Mercury	117823-07-06 17:58 G	44755213.07	44755213.25	44755213.46	0.0059	0.0014
Mercury	117823-10-02 19:39 G	44755301.14	44755301.32	44755301.51	0.0060	0.0022
Mercury	117823-12-29 21:05 G	44755389.21	44755389.38	44755389.55	0.0060	0.0031
Mercury	117824-03-26 22:17 G	44755477.29	44755477.43	44755477.59	0.0060	0.0040
Mercury	117824-06-22 23:43 G	44755565.39	44755565.49	44755565.61	0.0060	0.0049
Mercury	117824-09-19 01:10 G	44755653.52	44755653.55	44755653.60	0.0060	0.0058
Venus	117834-08-24 03:19 G	44759279.62	44759279.64	44759279.73	0.0063	0.0061
Venus	117835-04-06 06:55 G	44759504.61	44759504.79	44759505.00	0.0063	0.0025
Venus	117835-11-17 10:17 G	44759729.72	44759729.93	44759730.15	0.0063	0.0011

Venus	117836-06-29 13:10 G	44759954.93	44759955.05	44759955.21	0.0063	0.0047
Mars	117840-09-06 02:22 G	44761484.31	44761484.60	44761484.91	0.0065	0.0017
Earth	117844-05-28 12:41 G	44762844.84	44762845.03	44762845.26	0.0066	0.0037
Moon	117844-05-28 13:24 G	44762844.85	44762845.06	44762845.28	0.0066	0.0037 *
Earth	117845-05-30 01:10 G	44763211.42	44763211.55	44763211.75	0.0066	0.0052
Moon	117845-05-30 03:19 G	44763211.52	44763211.64	44763211.82	0.0066	0.0053 *
Mercury	117918-07-12 18:27 G	44789917.21	44789917.27	44789917.36	0.0085	0.0069
Mercury	117918-10-08 19:53 G	44790005.23	44790005.33	44790005.44	0.0085	0.0051
Mercury	117919-01-04 21:05 G	44790093.27	44790093.38	44790093.51	0.0085	0.0034
Mercury	117919-04-02 22:31 G	44790181.31	44790181.44	44790181.57	0.0085	0.0016
Mercury	117919-06-29 23:43 G	44790269.36	44790269.49	44790269.62	0.0085	0.0002
Mercury	117919-09-26 00:41 G	44790357.41	44790357.53	44790357.67	0.0085	0.0019
Mercury	117919-12-23 02:07 G	44790445.47	44790445.59	44790445.71	0.0085	0.0036
Mercury	117920-03-20 03:19 G	44790533.54	44790533.64	44790533.74	0.0084	0.0053
Mercury	117920-06-16 04:31 G	44790621.62	44790621.69	44790621.76	0.0084	0.0070
Venus	117925-12-31 07:53 G	44792645.64	44792645.83	44792646.05	0.0081	0.0034
Venus	117926-08-13 19:39 G	44792871.15	44792871.32	44792871.52	0.0081	0.0048
Moon	117931-11-28 00:27 G	44794803.34	44794803.52	44794803.75	0.0078	0.0048
Earth	117931-11-28 04:17 G	44794803.50	44794803.68	44794803.90	0.0078	0.0051 *

# 119TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 119th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
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Mercury	118068-03-18 18:27 G	44844589.21	44844589.27	44844589.37	0.0059	0.0053
Mercury	118068-06-14 20:07 G	44844677.22	44844677.34	44844677.47	0.0059	0.0044
Mercury	118068-09-10 21:05 G	44844765.25	44844765.38	44844765.56	0.0059	0.0036
Mercury	118068-12-07 22:31 G	44844853.28	44844853.44	44844853.64	0.0059	0.0028
Mercury	118069-03-06 00:12 G	44844941.33	44844941.51	44844941.70	0.0059	0.0018
Mercury	118069-06-02 01:39 G	44845029.38	44845029.57	44845029.77	0.0059	0.0009
Mercury	118069-08-29 03:05 G	44845117.43	44845117.63	44845117.83	0.0059	0.0001
Mercury	118069-11-25 04:17 G	44845205.49	44845205.68	44845205.88	0.0059	0.0009
Mercury	118070-02-21 05:29 G	44845293.56	44845293.73	44845293.94	0.0059	0.0018
Mercury	118070-05-20 06:55 G	44845381.63	44845381.79	44845381.98	0.0060	0.0026
Mercury	118070-08-16 08:07 G	44845469.70	44845469.84	44845470.02	0.0060	0.0036
Mercury	118070-11-12 10:03 G	44845557.79	44845557.92	44845558.05	0.0060	0.0044
Mercury	118071-02-08 11:29 G	44845645.89	44845645.98	44845646.07	0.0060	0.0053
Venus	118081-05-05 05:43 G	44849384.64	44849384.74	44849384.88	0.0063	0.0052
Venus	118081-12-16 09:19 G	44849609.68	44849609.89	44849610.10	0.0063	0.0016
Venus	118082-07-29 11:58 G	44849834.81	44849835.00	44849835.23	0.0063	0.0020
Venus	118083-03-11 15:05 G	44850060.06	44850060.13	44850060.26	0.0063	0.0056
Mars	118087-01-28 00:55 G	44851478.27	44851478.54	44851478.83	0.0064	0.0029
Moon	118091-06-01 05:58 G	44853063.51	44853063.75	44853064.01	0.0066	0.0006
Earth	118091-06-01 08:51 G	44853063.62	44853063.87	44853064.13	0.0066	0.0004 *
Mercury	118164-12-01 06:27 G	44879909.76	44879909.77	44879909.80	0.0085	0.0084
Mercury	118165-02-27 07:39 G	44879997.75	44879997.82	44879997.91	0.0085	0.0066
Mercury	118165-05-26 09:05 G	44880085.77	44880085.88	44880085.99	0.0085	0.0048
Mercury	118165-08-22 10:17 G	44880173.81	44880173.93	44880174.06	0.0085	0.0031
Mercury	118165-11-18 11:29 G	44880261.85	44880261.98	44880262.11	0.0085	0.0014
Mercury	118166-02-14 12:41 G	44880349.90	44880350.03	44880350.17	0.0085	0.0005
Mercury	118166-05-13 13:53 G	44880437.96	44880438.08	44880438.21	0.0085	0.0021
Mercury	118166-08-09 15:05 G	44880526.02	44880526.13	44880526.25	0.0084	0.0038
Mercury	118166-11-05 16:17 G	44880614.09	44880614.18	44880614.28	0.0084	0.0055

Mercury	118167-02-01 17:29 G	44880702.17	44880702.23	44880702.30	0.0084	0.0072
Venus	118172-09-11 10:03 G	44882750.71	44882750.92	44882751.14	0.0081	0.0021
Venus	118173-04-24 21:19 G	44882976.26	44882976.39	44882976.56	0.0081	0.0060
Mars	118176-04-16 20:51 G	44884064.11	44884064.37	44884064.68	0.0079	0.0035
Earth	118178-12-01 05:00 G	44885022.45	44885022.71	44885022.97	0.0078	0.0003
Moon	118178-12-01 06:55 G	44885022.54	44885022.79	44885023.05	0.0078	0.0006 *
Mercury	118314-11-06 04:31 G	44934669.64	44934669.69	44934669.79	0.0059	0.0055
Mercury	118315-02-02 06:12 G	44934757.65	44934757.76	44934757.89	0.0059	0.0046
Mercury	118315-05-01 07:53 G	44934845.68	44934845.83	44934845.98	0.0059	0.0038
Mercury	118315-07-28 08:51 G	44934933.71	44934933.87	44934934.06	0.0059	0.0029
Mercury	118315-10-24 10:17 G	44935021.75	44935021.93	44935022.13	0.0059	0.0020
Mercury	118316-01-20 11:43 G	44935109.80	44935109.99	44935110.19	0.0059	0.0012
Mercury	118316-04-17 13:10 G	44935197.86	44935198.05	44935198.25	0.0059	0.0003
Mercury	118316-07-14 14:22 G	44935285.91	44935286.10	44935286.31	0.0059	0.0007
Mercury	118316-10-10 15:34 G	44935373.98	44935374.15	44935374.36	0.0059	0.0016
Mercury	118317-01-06 17:15 G	44935462.04	44935462.22	44935462.41	0.0060	0.0024
Mercury	118317-04-04 18:27 G	44935550.12	44935550.27	44935550.45	0.0060	0.0033
Mercury	118317-07-01 19:53 G	44935638.20	44935638.33	44935638.48	0.0060	0.0042
Mercury	118317-09-27 21:05 G	44935726.30	44935726.38	44935726.50	0.0060	0.0051
Venus	118328-01-17 05:43 G	44939489.62	44939489.74	44939489.86	0.0063	0.0052
Venus	118328-08-29 08:36 G	44939714.66	44939714.86	44939715.08	0.0063	0.0017
Venus	118329-04-11 11:43 G	44939939.80	44939939.99	44939940.21	0.0063	0.0019
Venus	118329-11-22 14:36 G	44940165.03	44940165.11	44940165.24	0.0063	0.0055
Earth	118338-06-06 00:12 G	44943282.26	44943282.51	44943282.76	0.0066	0.0016
Moon	118338-06-06 03:19 G	44943282.40	44943282.64	44943282.91	0.0066	0.0012 *
Mercury	118411-10-16 19:53 G	44970078.27	44970078.33	44970078.41	0.0085	0.0072
Mercury	118412-01-12 21:19 G	44970166.29	44970166.39	44970166.49	0.0085	0.0054
Mercury	118412-04-09 22:31 G	44970254.32	44970254.44	44970254.56	0.0085	0.0037
Mercury	118412-07-06 23:43 G	44970342.36	44970342.49	44970342.62	0.0085	0.0020
Mercury	118412-10-03 00:55 G	44970430.41	44970430.54	44970430.68	0.0085	0.0003

Mercury	118412-12-30 02:07 G	44970518.47	44970518.59	44970518.72	0.0085	0.0015
Mercury	118413-03-28 03:19 G	44970606.52	44970606.64	44970606.77	0.0085	0.0032
Mercury	118413-06-24 04:31 G	44970694.59	44970694.69	44970694.80	0.0084	0.0049
Mercury	118413-09-20 05:43 G	44970782.67	44970782.74	44970782.82	0.0084	0.0066
Mercury	118413-12-17 06:41 G	44970870.78	44970870.78	44970870.81	0.0084	0.0083
Venus	118419-05-25 08:22 G	44972855.64	44972855.85	44972856.07	0.0081	0.0024
Venus	118420-01-05 19:24 G	44973081.17	44973081.31	44973081.49	0.0081	0.0057
Mars	118422-09-07 21:48 G	44974057.28	44974057.41	44974057.58	0.0080	0.0070
Moon	118425-12-04 20:07 G	44975241.13	44975241.34	44975241.59	0.0078	0.0036
Earth	118425-12-04 23:15 G	44975241.26	44975241.47	44975241.71	0.0078	0.0039 *
Mercury	118561-06-23 14:22 G	45024750.10	45024750.10	45024750.12	0.0059	0.0059
Mercury	118561-09-19 15:34 G	45024838.06	45024838.15	45024838.26	0.0059	0.0050
Mercury	118561-12-16 16:46 G	45024926.08	45024926.20	45024926.36	0.0059	0.0042
Mercury	118562-03-14 18:12 G	45025014.11	45025014.26	45025014.44	0.0059	0.0033
Mercury	118562-06-10 19:53 G	45025102.15	45025102.33	45025102.51	0.0059	0.0024
Mercury	118562-09-06 21:19 G	45025190.20	45025190.39	45025190.58	0.0059	0.0016
Mercury	118562-12-03 22:31 G	45025278.25	45025278.44	45025278.64	0.0059	0.0007
Mercury	118563-03-01 23:58 G	45025366.31	45025366.50	45025366.70	0.0059	0.0002
Mercury	118563-05-29 01:24 G	45025454.37	45025454.56	45025454.76	0.0059	0.0011
Mercury	118563-08-25 02:36 G	45025542.43	45025542.61	45025542.81	0.0059	0.0020
Mercury	118563-11-21 03:48 G	45025630.50	45025630.66	45025630.85	0.0059	0.0029
Mercury	118564-02-17 05:00 G	45025718.58	45025718.71	45025718.89	0.0060	0.0038
Mercury	118564-05-15 06:27 G	45025806.67	45025806.77	45025806.92	0.0060	0.0047
Mercury	118564-08-11 08:22 G	45025894.78	45025894.85	45025894.92	0.0060	0.0055
Venus	118574-09-28 04:03 G	45029594.59	45029594.67	45029594.76	0.0062	0.0057
Venus	118575-05-11 07:10 G	45029819.60	45029819.80	45029820.00	0.0063	0.0022
Venus	118575-12-22 10:03 G	45030044.72	45030044.92	45030045.14	0.0063	0.0014
Venus	118576-08-03 12:55 G	45030269.93	45030270.04	45030270.20	0.0063	0.0049
Mars	118581-10-03 06:55 G	45032156.54	45032156.79	45032157.06	0.0065	0.0035
Moon	118584-06-06 19:39 G	45033134.24	45033134.32	45033134.45	0.0066	0.0060

Earth	118584-06-06 23:00 G	45033134.39	45033134.46	45033134.61	0.0066	0.0060	*
Earth	118585-06-08 12:12 G	45033500.80	45033501.01	45033501.26	0.0066	0.0028	
Moon	118585-06-08 15:05 G	45033500.91	45033501.13	45033501.39	0.0066	0.0028	*
Mercury	118658-08-31 08:07 G	45060246.78	45060246.84	45060246.92	0.0085	0.0070	
Mercury	118658-11-27 09:34 G	45060334.80	45060334.90	45060335.00	0.0085	0.0052	
Mercury	118659-02-23 10:46 G	45060422.83	45060422.95	45060423.07	0.0085	0.0035	
Mercury	118659-05-22 11:58 G	45060510.88	45060511.00	45060511.13	0.0085	0.0018	
Mercury	118659-08-18 13:24 G	45060598.92	45060599.06	45060599.19	0.0085	0.0003	
Mercury	118659-11-14 14:22 G	45060686.98	45060687.10	45060687.24	0.0085	0.0017	
Mercury	118660-02-10 15:34 G	45060775.04	45060775.15	45060775.28	0.0084	0.0034	
Mercury	118660-05-08 16:46 G	45060863.10	45060863.20	45060863.31	0.0084	0.0051	
Mercury	118660-08-04 17:58 G	45060951.18	45060951.25	45060951.33	0.0084	0.0068	
Venus	118666-02-04 02:07 G	45062960.42	45062960.59	45062960.80	0.0081	0.0045	
Venus	118666-09-17 14:07 G	45063185.90	45063186.09	45063186.30	0.0081	0.0037	
Saturn	118672-02-08 13:24 G	45065155.64	45065156.06	45065156.62	0.0078	0.0055	
Moon	118672-12-08 09:19 G	45065459.73	45065459.89	45065460.07	0.0078	0.0058	
Earth	118672-12-08 11:43 G	45065459.82	45065459.99	45065460.19	0.0078	0.0055	*
Mercury	118808-08-04 00:55 G	45115006.46	45115006.54	45115006.64	0.0059	0.0052	
Mercury	118808-10-31 01:53 G	45115094.48	45115094.58	45115094.74	0.0059	0.0044	
Mercury	118809-01-27 03:34 G	45115182.51	45115182.65	45115182.83	0.0059	0.0035	
Mercury	118809-04-25 05:00 G	45115270.55	45115270.71	45115270.90	0.0059	0.0027	
Mercury	118809-07-22 06:12 G	45115358.59	45115358.76	45115358.97	0.0059	0.0019	
Mercury	118809-10-18 07:53 G	45115446.64	45115446.83	45115447.03	0.0059	0.0009	
Mercury	118810-01-14 09:19 G	45115534.70	45115534.89	45115535.09	0.0059	0.0001	
Mercury	118810-04-12 10:46 G	45115622.76	45115622.95	45115623.15	0.0059	0.0009	
Mercury	118810-07-09 11:58 G	45115710.82	45115711.00	45115711.20	0.0059	0.0017	
Mercury	118810-10-05 13:10 G	45115798.89	45115799.05	45115799.24	0.0059	0.0027	
Mercury	118811-01-01 14:22 G	45115886.96	45115887.10	45115887.28	0.0059	0.0036	
Mercury	118811-03-30 16:03 G	45115975.05	45115975.17	45115975.31	0.0060	0.0044	
Mercury	118811-06-26 17:29 G	45116063.15	45116063.23	45116063.33	0.0060	0.0053	

Venus	118822-01-21 02:07 G	45119924.43	45119924.59	45119924.78	0.0063	0.0037
Venus	118822-09-03 05:29 G	45120149.52	45120149.73	45120149.95	0.0063	0.0002
Venus	118823-04-16 08:22 G	45120374.69	45120374.85	45120375.05	0.0063	0.0034
Mars	118828-02-24 04:31 G	45122149.57	45122149.69	45122149.91	0.0065	0.0055
Moon	118831-06-11 03:19 G	45123352.62	45123352.64	45123352.68	0.0066	0.0065
Earth	118831-06-11 06:12 G	45123352.71	45123352.76	45123352.89	0.0066	0.0062
Earth	118832-06-11 19:39 G	45123719.10	45123719.32	45123719.57	0.0066	0.0026
Moon	118832-06-11 22:17 G	45123719.20	45123719.43	45123719.67	0.0066	0.0030 *
Mercury	118905-07-15 19:24 G	45150415.27	45150415.31	45150415.38	0.0085	0.0077
Mercury	118905-10-11 20:51 G	45150503.28	45150503.37	45150503.47	0.0085	0.0059
Mercury	118906-01-07 22:03 G	45150591.31	45150591.42	45150591.54	0.0085	0.0042
Mercury	118906-04-05 23:15 G	45150679.35	45150679.47	45150679.60	0.0085	0.0025
Mercury	118906-07-03 00:41 G	45150767.40	45150767.53	45150767.66	0.0085	0.0007
Mercury	118906-09-29 01:53 G	45150855.45	45150855.58	45150855.71	0.0085	0.0010
Mercury	118906-12-26 02:51 G	45150943.50	45150943.62	45150943.75	0.0085	0.0028
Mercury	118907-03-24 04:03 G	45151031.57	45151031.67	45151031.79	0.0084	0.0044
Mercury	118907-06-20 05:15 G	45151119.64	45151119.72	45151119.82	0.0084	0.0061
Mercury	118907-09-16 06:27 G	45151207.73	45151207.77	45151207.83	0.0084	0.0078
Venus	118912-10-16 17:15 G	45153065.21	45153065.22	45153065.25	0.0082	0.0081
Venus	118913-05-30 05:00 G	45153290.49	45153290.71	45153290.94	0.0081	0.0002
Venus	118914-01-10 16:03 G	45153516.16	45153516.17	45153516.23	0.0081	0.0080
Mars	118917-05-14 11:15 G	45154735.69	45154735.97	45154736.29	0.0079	0.0029
Moon	118919-12-12 16:31 G	45155678.05	45155678.19	45155678.40	0.0078	0.0057
Earth	118919-12-12 18:55 G	45155678.12	45155678.29	45155678.50	0.0078	0.0054 *

# 120TH MILLENNIUM CE



**This is a list of transits visible from Pluto in the 120th millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	119055-06-19 09:34	G	45205174.86	45205174.90	45205174.97	0.0059	0.0056	
Mercury	119055-09-15 10:46	G	45205262.86	45205262.95	45205263.09	0.0059	0.0048	
Mercury	119055-12-12 12:12	G	45205350.88	45205351.01	45205351.18	0.0059	0.0039	
Mercury	119056-03-09 13:53	G	45205438.92	45205439.08	45205439.25	0.0059	0.0030	
Mercury	119056-06-05 15:05	G	45205526.96	45205527.13	45205527.33	0.0059	0.0022	
Mercury	119056-09-01 16:31	G	45205615.01	45205615.19	45205615.39	0.0059	0.0013	
Mercury	119056-11-28 17:58	G	45205703.06	45205703.25	45205703.45	0.0059	0.0005	
Mercury	119057-02-24 19:24	G	45205791.12	45205791.31	45205791.51	0.0059	0.0004	
Mercury	119057-05-23 20:36	G	45205879.18	45205879.36	45205879.56	0.0059	0.0013	
Mercury	119057-08-19 22:03	G	45205967.24	45205967.42	45205967.61	0.0059	0.0022	
Mercury	119057-11-15 23:15	G	45206055.32	45206055.47	45206055.65	0.0059	0.0031	
Mercury	119058-02-12 00:27	G	45206143.40	45206143.52	45206143.69	0.0059	0.0040	
Mercury	119058-05-11 01:53	G	45206231.49	45206231.58	45206231.71	0.0060	0.0049	
Mercury	119058-08-07 03:05	G	45206319.61	45206319.63	45206319.71	0.0060	0.0058	
Venus	119068-10-02 19:53	G	45210029.26	45210029.33	45210029.46	0.0062	0.0056	
Venus	119069-05-15 23:29	G	45210254.28	45210254.48	45210254.69	0.0063	0.0021	
Venus	119069-12-27 02:36	G	45210479.41	45210479.61	45210479.83	0.0063	0.0015	
Venus	119070-08-09 05:43	G	45210704.63	45210704.74	45210704.88	0.0063	0.0050	
Mars	119076-06-07 07:39	G	45212833.63	45212833.82	45212834.04	0.0065	0.0049	
Earth	119079-06-16 01:24	G	45213937.31	45213937.56	45213937.80	0.0066	0.0019	
Moon	119079-06-16 04:03	G	45213937.43	45213937.67	45213937.93	0.0066	0.0018	*
Mercury	119152-08-26 07:10	G	45240671.75	45240671.80	45240671.87	0.0085	0.0074	
Mercury	119152-11-22 08:22	G	45240759.76	45240759.85	45240759.96	0.0085	0.0057	
Mercury	119153-02-18 09:48	G	45240847.80	45240847.91	45240848.03	0.0085	0.0039	
Mercury	119153-05-17 11:00	G	45240935.84	45240935.96	45240936.09	0.0085	0.0022	

Mercury	119153-08-13 12:12 G	45241023.88	45241024.01	45241024.15	0.0085	0.0006
Mercury	119153-11-09 13:24 G	45241111.94	45241112.06	45241112.20	0.0085	0.0013
Mercury	119154-02-05 14:36 G	45241199.99	45241200.11	45241200.24	0.0085	0.0030
Mercury	119154-05-04 15:48 G	45241288.06	45241288.16	45241288.28	0.0084	0.0047
Mercury	119154-07-31 17:00 G	45241376.13	45241376.21	45241376.30	0.0084	0.0063
Mercury	119154-10-27 17:58 G	45241464.23	45241464.25	45241464.30	0.0084	0.0081
Venus	119160-02-09 15:34 G	45243394.99	45243395.15	45243395.34	0.0081	0.0052
Venus	119160-09-22 03:34 G	45243620.45	45243620.65	45243620.87	0.0081	0.0029
Moon	119166-12-15 17:15 G	45245896.00	45245896.22	45245896.48	0.0078	0.0032
Earth	119166-12-15 20:36 G	45245896.15	45245896.36	45245896.62	0.0078	0.0036 *
Mercury	119302-07-30 17:58 G	45295431.24	45295431.25	45295431.32	0.0059	0.0058
Mercury	119302-10-26 19:39 G	45295519.23	45295519.32	45295519.44	0.0059	0.0049
Mercury	119303-01-22 20:51 G	45295607.25	45295607.37	45295607.53	0.0059	0.0041
Mercury	119303-04-20 22:17 G	45295695.28	45295695.43	45295695.61	0.0059	0.0032
Mercury	119303-07-17 23:58 G	45295783.32	45295783.50	45295783.68	0.0059	0.0023
Mercury	119303-10-14 01:10 G	45295871.37	45295871.55	45295871.75	0.0059	0.0015
Mercury	119304-01-10 02:36 G	45295959.42	45295959.61	45295959.81	0.0059	0.0006
Mercury	119304-04-07 04:03 G	45296047.47	45296047.67	45296047.87	0.0059	0.0003
Mercury	119304-07-04 05:15 G	45296135.54	45296135.72	45296135.92	0.0059	0.0012
Mercury	119304-09-30 06:27 G	45296223.60	45296223.77	45296223.97	0.0059	0.0021
Mercury	119304-12-27 08:07 G	45296311.67	45296311.84	45296312.02	0.0059	0.0029
Mercury	119305-03-25 09:19 G	45296399.75	45296399.89	45296400.06	0.0059	0.0038
Mercury	119305-06-21 10:31 G	45296487.84	45296487.94	45296488.08	0.0059	0.0047
Mercury	119305-09-17 11:43 G	45296575.95	45296575.99	45296576.09	0.0060	0.0056
Venus	119316-01-26 14:51 G	45300359.00	45300359.12	45300359.27	0.0062	0.0049
Venus	119316-09-07 18:12 G	45300584.05	45300584.26	45300584.48	0.0063	0.0014
Venus	119317-04-20 21:05 G	45300809.19	45300809.38	45300809.60	0.0063	0.0022
Venus	119317-12-02 00:12 G	45301034.44	45301034.51	45301034.62	0.0063	0.0057
Earth	119326-06-19 01:53 G	45304155.33	45304155.58	45304155.84	0.0066	0.0003
Moon	119326-06-19 04:03 G	45304155.42	45304155.67	45304155.92	0.0066	0.0002 *

Mercury	119399-10-06 17:43 G	45330928.21	45330928.24	45330928.29	0.0085	0.0081
Mercury	119400-01-02 18:55 G	45331016.22	45331016.29	45331016.39	0.0085	0.0063
Mercury	119400-03-31 20:22 G	45331104.25	45331104.35	45331104.47	0.0085	0.0045
Mercury	119400-06-27 21:34 G	45331192.28	45331192.40	45331192.53	0.0085	0.0028
Mercury	119400-09-23 23:00 G	45331280.33	45331280.46	45331280.59	0.0085	0.0011
Mercury	119400-12-21 00:12 G	45331368.38	45331368.51	45331368.64	0.0085	0.0006
Mercury	119401-03-19 01:24 G	45331456.43	45331456.56	45331456.69	0.0085	0.0024
Mercury	119401-06-15 02:36 G	45331544.50	45331544.61	45331544.73	0.0085	0.0040
Mercury	119401-09-11 03:34 G	45331632.57	45331632.65	45331632.76	0.0084	0.0058
Mercury	119401-12-08 04:46 G	45331720.65	45331720.70	45331720.77	0.0084	0.0075
Venus	119407-06-04 10:46 G	45333724.77	45333724.95	45333725.17	0.0081	0.0038
Venus	119408-01-15 22:17 G	45333950.26	45333950.43	45333950.64	0.0081	0.0043
Mars	119412-01-17 05:43 G	45335412.47	45335412.74	45335413.06	0.0079	0.0031
Moon	119413-12-18 17:15 G	45336113.95	45336114.22	45336114.49	0.0078	0.0004
Earth	119413-12-18 18:12 G	45336114.00	45336114.26	45336114.53	0.0078	0.0001 *
Mercury	119549-12-07 03:34 G	45385775.59	45385775.65	45385775.76	0.0059	0.0053
Mercury	119550-03-05 05:14 G	45385863.60	45385863.72	45385863.86	0.0059	0.0044
Mercury	119550-06-01 06:26 G	45385951.63	45385951.77	45385951.95	0.0059	0.0036
Mercury	119550-08-28 07:53 G	45386039.67	45386039.83	45386040.02	0.0059	0.0027
Mercury	119550-11-24 09:05 G	45386127.71	45386127.88	45386128.09	0.0059	0.0020
Mercury	119551-02-20 10:46 G	45386215.76	45386215.95	45386216.15	0.0059	0.0010
Mercury	119551-05-19 12:12 G	45386303.82	45386304.01	45386304.21	0.0059	0.0002
Mercury	119551-08-15 13:38 G	45386391.87	45386392.07	45386392.27	0.0059	0.0007
Mercury	119551-11-11 14:36 G	45386479.94	45386480.11	45386480.32	0.0059	0.0017
Mercury	119552-02-07 16:17 G	45386568.00	45386568.18	45386568.36	0.0059	0.0025
Mercury	119552-05-05 17:14 G	45386656.08	45386656.22	45386656.40	0.0059	0.0034
Mercury	119552-08-01 18:26 G	45386744.16	45386744.27	45386744.44	0.0059	0.0043
Mercury	119552-10-28 19:53 G	45386832.26	45386832.33	45386832.45	0.0059	0.0051
Venus	119563-05-21 08:07 G	45390688.72	45390688.84	45390689.01	0.0062	0.0046
Venus	119564-01-01 11:43 G	45390913.78	45390913.99	45390914.21	0.0063	0.0011

Venus	119564-08-13 14:22 G	45391138.92	45391139.10	45391139.32	0.0063	0.0025
Venus	119565-03-26 17:29 G	45391364.20	45391364.23	45391364.32	0.0063	0.0060
Mars	119571-02-09 07:38 G	45393509.52	45393509.82	45393510.14	0.0065	0.0014
Moon	119573-06-21 22:17 G	45394373.22	45394373.43	45394373.65	0.0066	0.0031
Earth	119573-06-22 00:41 G	45394373.30	45394373.53	45394373.75	0.0066	0.0030 *
Moon	119574-06-23 12:12 G	45394739.93	45394740.01	45394740.18	0.0066	0.0059
Earth	119574-06-23 12:55 G	45394739.95	45394740.04	45394740.18	0.0066	0.0059 *
Mercury	119647-02-13 04:46 G	45421272.66	45421272.70	45421272.78	0.0085	0.0077
Mercury	119647-05-12 06:26 G	45421360.67	45421360.77	45421360.86	0.0085	0.0058
Mercury	119647-08-08 07:38 G	45421448.71	45421448.82	45421448.94	0.0085	0.0041
Mercury	119647-11-04 08:50 G	45421536.75	45421536.87	45421537.00	0.0085	0.0024
Mercury	119648-01-31 10:02 G	45421624.79	45421624.92	45421625.06	0.0085	0.0007
Mercury	119648-04-28 11:14 G	45421712.84	45421712.97	45421713.11	0.0085	0.0011
Mercury	119648-07-25 12:26 G	45421800.90	45421801.02	45421801.15	0.0085	0.0028
Mercury	119648-10-21 13:38 G	45421888.96	45421889.07	45421889.19	0.0084	0.0044
Mercury	119649-01-17 14:50 G	45421977.04	45421977.12	45421977.21	0.0084	0.0061
Mercury	119649-04-15 15:48 G	45422065.13	45422065.16	45422065.22	0.0084	0.0078
Venus	119654-09-26 03:05 G	45424054.43	45424054.63	45424054.83	0.0081	0.0038
Venus	119655-05-09 14:36 G	45424279.93	45424280.11	45424280.31	0.0081	0.0042
Earth	119660-12-20 09:19 G	45426331.71	45426331.89	45426332.10	0.0078	0.0052
Moon	119660-12-20 12:26 G	45426331.85	45426332.02	45426332.22	0.0078	0.0056 *
Mercury	119797-04-14 11:43 G	45476119.93	45476119.99	45476120.09	0.0059	0.0054
Mercury	119797-07-11 13:24 G	45476207.94	45476208.06	45476208.19	0.0059	0.0045
Mercury	119797-10-07 14:22 G	45476295.97	45476296.10	45476296.28	0.0059	0.0037
Mercury	119798-01-03 16:02 G	45476384.01	45476384.17	45476384.35	0.0059	0.0028
Mercury	119798-04-01 17:14 G	45476472.05	45476472.22	45476472.42	0.0059	0.0020
Mercury	119798-06-28 18:55 G	45476560.10	45476560.29	45476560.48	0.0059	0.0011
Mercury	119798-09-24 20:07 G	45476648.15	45476648.34	45476648.54	0.0059	0.0003
Mercury	119798-12-21 21:34 G	45476736.21	45476736.40	45476736.60	0.0059	0.0006
Mercury	119799-03-19 23:00 G	45476824.27	45476824.46	45476824.65	0.0059	0.0014

Mercury	119799-06-15 23:58 G	45476912.33	45476912.50	45476912.70	0.0059	0.0024
Mercury	119799-09-12 01:10 G	45477000.41	45477000.55	45477000.74	0.0059	0.0033
Mercury	119799-12-09 02:50 G	45477088.49	45477088.62	45477088.77	0.0059	0.0041
Mercury	119800-03-07 04:02 G	45477176.58	45477176.67	45477176.80	0.0059	0.0050
Mercury	119800-06-03 05:14 G	45477264.71	45477264.72	45477264.78	0.0059	0.0059
Venus	119810-09-12 23:14 G	45481018.36	45481018.47	45481018.60	0.0062	0.0052
Venus	119811-04-26 02:22 G	45481243.41	45481243.60	45481243.82	0.0062	0.0018
Venus	119811-12-07 05:29 G	45481468.54	45481468.73	45481468.95	0.0063	0.0018
Venus	119812-07-19 08:22 G	45481693.76	45481693.85	45481693.99	0.0063	0.0053
Earth	119821-06-26 06:26 G	45484957.53	45484957.77	45484958.03	0.0066	0.0016
Moon	119821-06-26 09:34 G	45484957.66	45484957.90	45484958.16	0.0066	0.0017 *
Mercury	119894-06-22 14:50 G	45511617.10	45511617.12	45511617.17	0.0085	0.0081
Mercury	119894-09-18 16:17 G	45511705.10	45511705.18	45511705.27	0.0085	0.0064
Mercury	119894-12-15 17:29 G	45511793.13	45511793.23	45511793.35	0.0085	0.0046
Mercury	119895-03-13 18:41 G	45511881.17	45511881.28	45511881.41	0.0085	0.0029
Mercury	119895-06-09 20:07 G	45511969.21	45511969.34	45511969.47	0.0085	0.0012
Mercury	119895-09-05 21:19 G	45512057.26	45512057.39	45512057.53	0.0085	0.0006
Mercury	119895-12-02 22:31 G	45512145.32	45512145.44	45512145.57	0.0085	0.0023
Mercury	119896-02-28 23:43 G	45512233.38	45512233.49	45512233.61	0.0085	0.0040
Mercury	119896-05-27 00:55 G	45512321.45	45512321.54	45512321.64	0.0084	0.0056
Mercury	119896-08-23 01:53 G	45512409.53	45512409.58	45512409.66	0.0084	0.0074
Venus	119902-01-19 14:50 G	45514383.97	45514384.12	45514384.31	0.0082	0.0054
Venus	119902-09-02 02:36 G	45514609.41	45514609.61	45514609.84	0.0081	0.0027
Mars	119906-09-19 12:26 G	45516087.83	45516088.02	45516088.28	0.0079	0.0055
Moon	119908-12-25 22:17 G	45516916.21	45516916.43	45516916.68	0.0078	0.0030
Earth	119908-12-25 23:43 G	45516916.27	45516916.49	45516916.75	0.0078	0.0031 *

# 121ST MILLENNIUM CE

**This is a list of transits visible from Pluto in the 121st millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	120044-08-21 19:24	G	45566464.28	45566464.31	45566464.36	0.0059	0.0057	
Mercury	120044-11-17 20:22	G	45566552.27	45566552.35	45566552.48	0.0059	0.0049	
Mercury	120045-02-13 21:34	G	45566640.29	45566640.40	45566640.57	0.0059	0.0041	
Mercury	120045-05-12 23:14	G	45566728.32	45566728.47	45566728.65	0.0059	0.0032	
Mercury	120045-08-09 00:41	G	45566816.36	45566816.53	45566816.72	0.0059	0.0024	
Mercury	120045-11-05 02:07	G	45566904.41	45566904.59	45566904.79	0.0059	0.0015	
Mercury	120046-02-01 03:34	G	45566992.46	45566992.65	45566992.85	0.0059	0.0007	
Mercury	120046-04-30 05:00	G	45567080.51	45567080.71	45567080.91	0.0059	0.0002	
Mercury	120046-07-27 06:26	G	45567168.57	45567168.77	45567168.96	0.0059	0.0011	
Mercury	120046-10-23 07:24	G	45567256.64	45567256.81	45567257.01	0.0059	0.0020	
Mercury	120047-01-19 08:36	G	45567344.71	45567344.86	45567345.06	0.0059	0.0029	
Mercury	120047-04-17 10:17	G	45567432.78	45567432.93	45567433.09	0.0059	0.0037	
Mercury	120047-07-14 11:14	G	45567520.87	45567520.97	45567521.12	0.0059	0.0046	
Mercury	120047-10-10 13:10	G	45567608.97	45567609.05	45567609.13	0.0059	0.0054	
Venus	120058-08-17 15:34	G	45571572.97	45571573.15	45571573.36	0.0062	0.0028	
Venus	120059-03-30 18:55	G	45571798.08	45571798.29	45571798.51	0.0063	0.0007	
Venus	120059-11-10 22:17	G	45572023.27	45572023.43	45572023.59	0.0063	0.0041	
Moon	120068-06-27 18:55	G	45575175.08	45575175.29	45575175.54	0.0066	0.0032	
Earth	120068-06-27 21:05	G	45575175.18	45575175.38	45575175.62	0.0066	0.0033	*
Earth	120069-06-29 09:34	G	45575541.80	45575541.90	45575542.07	0.0066	0.0057	
Moon	120069-06-29 12:26	G	45575541.92	45575542.02	45575542.20	0.0066	0.0056	*
Mercury	120142-01-26 01:10	G	45602049.51	45602049.55	45602049.61	0.0085	0.0077	

Mercury	120142-04-24 02:36 G	45602137.52	45602137.61	45602137.71	0.0085	0.0060
Mercury	120142-07-21 03:48 G	45602225.55	45602225.66	45602225.78	0.0085	0.0042
Mercury	120142-10-17 05:00 G	45602313.59	45602313.71	45602313.84	0.0085	0.0025
Mercury	120143-01-13 06:26 G	45602401.64	45602401.77	45602401.90	0.0085	0.0008
Mercury	120143-04-11 07:38 G	45602489.69	45602489.82	45602489.95	0.0085	0.0009
Mercury	120143-07-08 08:50 G	45602577.75	45602577.87	45602578.00	0.0085	0.0026
Mercury	120143-10-04 09:48 G	45602665.81	45602665.91	45602666.04	0.0084	0.0044
Mercury	120143-12-31 11:00 G	45602753.88	45602753.96	45602754.07	0.0084	0.0060
Mercury	120144-03-28 12:26 G	45602841.97	45602842.02	45602842.08	0.0084	0.0077
Venus	120149-12-24 11:43 G	45604938.76	45604938.99	45604939.21	0.0081	0.0006
Venus	120150-08-06 23:00 G	45605164.37	45605164.46	45605164.56	0.0081	0.0073
Mars	120154-12-31 09:19 G	45606771.67	45606771.89	45606772.15	0.0079	0.0052
Earth	120155-12-28 03:48 G	45607133.51	45607133.66	45607133.86	0.0078	0.0058
Moon	120155-12-28 07:38 G	45607133.67	45607133.82	45607134.00	0.0078	0.0059 *
Mercury	120292-03-27 02:36 G	45656896.61	45656896.61	45656896.63	0.0059	0.0059
Mercury	120292-06-23 03:19 G	45656984.57	45656984.64	45656984.77	0.0059	0.0051
Mercury	120292-09-19 05:00 G	45657072.59	45657072.71	45657072.86	0.0059	0.0042
Mercury	120292-12-16 06:12 G	45657160.62	45657160.76	45657160.95	0.0059	0.0034
Mercury	120293-03-14 07:53 G	45657248.66	45657248.83	45657249.02	0.0059	0.0025
Mercury	120293-06-10 09:05 G	45657336.71	45657336.88	45657337.08	0.0059	0.0017
Mercury	120293-09-06 10:46 G	45657424.76	45657424.95	45657425.15	0.0059	0.0008
Mercury	120293-12-03 12:12 G	45657512.81	45657513.01	45657513.21	0.0059	0.0001
Mercury	120294-03-01 13:24 G	45657600.87	45657601.06	45657601.26	0.0059	0.0009
Mercury	120294-05-28 14:36 G	45657688.93	45657689.11	45657689.31	0.0059	0.0018
Mercury	120294-08-24 15:48 G	45657777.00	45657777.16	45657777.35	0.0059	0.0026
Mercury	120294-11-20 17:29 G	45657865.07	45657865.23	45657865.39	0.0059	0.0035
Mercury	120295-02-16 18:26 G	45657953.16	45657953.27	45657953.43	0.0059	0.0044
Mercury	120295-05-15 19:38 G	45658041.26	45658041.32	45658041.44	0.0059	0.0053
Venus	120305-12-11 02:22 G	45661902.47	45661902.60	45661902.74	0.0062	0.0049
Venus	120306-07-24 05:29 G	45662127.52	45662127.73	45662127.94	0.0062	0.0015

Venus	120307-03-06 08:36 G	45662352.66	45662352.86	45662353.07	0.0063	0.0020
Venus	120307-10-17 11:29 G	45662577.89	45662577.98	45662578.10	0.0063	0.0055
Mars	120314-01-22 19:10 G	45664867.06	45664867.30	45664867.58	0.0065	0.0037
Earth	120316-07-02 19:38 G	45665759.07	45665759.32	45665759.58	0.0066	0.0009
Moon	120316-07-02 22:02 G	45665759.16	45665759.42	45665759.68	0.0066	0.0008 *
Mercury	120389-08-31 10:17 G	45692481.92	45692481.93	45692481.97	0.0085	0.0083
Mercury	120389-11-27 11:43 G	45692569.91	45692569.99	45692570.08	0.0085	0.0066
Mercury	120390-02-23 12:55 G	45692657.94	45692658.04	45692658.16	0.0085	0.0048
Mercury	120390-05-22 14:07 G	45692745.98	45692746.09	45692746.22	0.0085	0.0031
Mercury	120390-08-18 15:34 G	45692834.02	45692834.15	45692834.28	0.0085	0.0014
Mercury	120390-11-14 16:46 G	45692922.07	45692922.20	45692922.34	0.0085	0.0004
Mercury	120391-02-10 17:58 G	45693010.13	45693010.25	45693010.38	0.0085	0.0021
Mercury	120391-05-09 19:10 G	45693098.19	45693098.30	45693098.42	0.0085	0.0037
Mercury	120391-08-05 20:22 G	45693186.26	45693186.35	45693186.46	0.0084	0.0054
Mercury	120391-11-01 21:48 G	45693274.34	45693274.41	45693274.48	0.0084	0.0071
Venus	120397-04-17 16:02 G	45695268.01	45695268.17	45695268.34	0.0082	0.0054
Venus	120397-11-29 03:48 G	45695493.44	45695493.66	45695493.87	0.0081	0.0026
Moon	120404-01-01 03:19 G	45697717.39	45697717.64	45697717.90	0.0078	0.0009
Earth	120404-01-01 06:55 G	45697717.53	45697717.79	45697718.05	0.0078	0.0012 *
Mercury	120540-01-27 09:48 G	45747416.87	45747416.91	45747417.01	0.0059	0.0055
Mercury	120540-04-24 11:43 G	45747504.87	45747504.99	45747505.11	0.0059	0.0046
Mercury	120540-07-21 12:55 G	45747592.90	45747593.04	45747593.20	0.0059	0.0038
Mercury	120540-10-17 14:07 G	45747680.94	45747681.09	45747681.28	0.0059	0.0030
Mercury	120541-01-13 15:48 G	45747768.98	45747769.16	45747769.35	0.0059	0.0021
Mercury	120541-04-11 17:00 G	45747857.02	45747857.21	45747857.41	0.0059	0.0013
Mercury	120541-07-08 18:26 G	45747945.08	45747945.27	45747945.47	0.0059	0.0004
Mercury	120541-10-04 19:53 G	45748033.13	45748033.33	45748033.53	0.0059	0.0004
Mercury	120541-12-31 21:05 G	45748121.19	45748121.38	45748121.58	0.0059	0.0013
Mercury	120542-03-29 22:17 G	45748209.26	45748209.43	45748209.63	0.0059	0.0022
Mercury	120542-06-25 23:29 G	45748297.33	45748297.48	45748297.67	0.0059	0.0030



Mercury	120542-09-22 01:10 G	45748385.41	45748385.55	45748385.71	0.0059	0.0038
Mercury	120542-12-19 02:07 G	45748473.50	45748473.59	45748473.73	0.0059	0.0048
Mercury	120543-03-17 03:48 G	45748561.61	45748561.66	45748561.74	0.0059	0.0056
Venus	120553-11-14 14:07 G	45752456.94	45752457.09	45752457.27	0.0062	0.0041
Venus	120554-06-27 17:14 G	45752682.01	45752682.22	45752682.44	0.0062	0.0007
Venus	120555-02-07 20:07 G	45752907.16	45752907.34	45752907.55	0.0063	0.0029
Mars	120562-05-04 04:17 G	45755549.38	45755549.68	45755550.01	0.0065	0.0011
Moon	120564-07-05 11:00 G	45756342.72	45756342.96	45756343.23	0.0066	0.0009
Earth	120564-07-05 14:22 G	45756342.86	45756343.10	45756343.37	0.0066	0.0008 *
Mercury	120637-07-02 19:24 G	45783002.29	45783002.31	45783002.36	0.0085	0.0083
Mercury	120637-09-28 21:05 G	45783090.30	45783090.38	45783090.47	0.0085	0.0064
Mercury	120637-12-25 22:17 G	45783178.32	45783178.43	45783178.54	0.0085	0.0047
Mercury	120638-03-23 23:29 G	45783266.36	45783266.48	45783266.61	0.0085	0.0030
Mercury	120638-06-20 00:41 G	45783354.41	45783354.53	45783354.67	0.0085	0.0013
Mercury	120638-09-16 02:07 G	45783442.46	45783442.59	45783442.72	0.0085	0.0005
Mercury	120638-12-13 03:05 G	45783530.51	45783530.63	45783530.77	0.0085	0.0022
Mercury	120639-03-11 04:17 G	45783618.57	45783618.68	45783618.81	0.0085	0.0039
Mercury	120639-06-07 05:43 G	45783706.64	45783706.74	45783706.84	0.0084	0.0055
Mercury	120639-09-03 06:41 G	45783794.72	45783794.78	45783794.86	0.0084	0.0072
Venus	120645-03-23 03:19 G	45785822.46	45785822.64	45785822.85	0.0081	0.0043
Venus	120645-11-03 15:05 G	45786047.95	45786048.13	45786048.34	0.0081	0.0037
Earth	120652-01-05 02:36 G	45788301.35	45788301.61	45788301.87	0.0078	0.0010
Moon	120652-01-05 04:17 G	45788301.43	45788301.68	45788301.93	0.0078	0.0013 *
Mercury	120787-11-28 16:31 G	45837937.15	45837937.19	45837937.27	0.0059	0.0056
Mercury	120788-02-24 17:43 G	45838025.15	45838025.24	45838025.38	0.0059	0.0048
Mercury	120788-05-22 18:55 G	45838113.17	45838113.29	45838113.46	0.0059	0.0040
Mercury	120788-08-18 20:36 G	45838201.21	45838201.36	45838201.54	0.0059	0.0031
Mercury	120788-11-14 21:48 G	45838289.25	45838289.41	45838289.61	0.0059	0.0023
Mercury	120789-02-10 23:29 G	45838377.29	45838377.48	45838377.68	0.0059	0.0014
Mercury	120789-05-10 00:55 G	45838465.35	45838465.54	45838465.74	0.0059	0.0006

Mercury	120789-08-06 02:22 G	45838553.40	45838553.60	45838553.80	0.0059	0.0003
Mercury	120789-11-02 03:34 G	45838641.46	45838641.65	45838641.85	0.0059	0.0011
Mercury	120790-01-29 04:31 G	45838729.52	45838729.69	45838729.90	0.0059	0.0021
Mercury	120790-04-27 05:58 G	45838817.59	45838817.75	45838817.94	0.0059	0.0029
Mercury	120790-07-24 07:10 G	45838905.67	45838905.80	45838905.98	0.0059	0.0037
Mercury	120790-10-20 08:36 G	45838993.76	45838993.86	45838994.01	0.0059	0.0046
Mercury	120791-01-16 09:48 G	45839081.86	45839081.91	45839082.02	0.0059	0.0055
Venus	120801-10-19 23:14 G	45843011.33	45843011.47	45843011.66	0.0062	0.0041
Venus	120802-06-02 02:36 G	45843236.40	45843236.61	45843236.84	0.0062	0.0007
Venus	120803-01-13 05:29 G	45843461.56	45843461.73	45843461.94	0.0063	0.0029
Mars	120810-08-14 05:14 G	45846231.41	45846231.72	45846232.04	0.0065	0.0001
Moon	120812-07-09 02:36 G	45846926.37	45846926.61	45846926.86	0.0066	0.0015
Earth	120812-07-09 05:29 G	45846926.49	45846926.73	45846927.00	0.0066	0.0012 *
Mercury	120885-07-30 05:14 G	45873610.66	45873610.72	45873610.80	0.0085	0.0071
Mercury	120885-10-26 06:41 G	45873698.68	45873698.78	45873698.89	0.0085	0.0054
Mercury	120886-01-22 07:53 G	45873786.72	45873786.83	45873786.95	0.0085	0.0036
Mercury	120886-04-20 09:19 G	45873874.76	45873874.89	45873875.02	0.0085	0.0019
Mercury	120886-07-17 10:31 G	45873962.81	45873962.94	45873963.07	0.0085	0.0002
Mercury	120886-10-13 11:43 G	45874050.86	45874050.99	45874051.12	0.0085	0.0015
Mercury	120887-01-09 12:55 G	45874138.92	45874139.04	45874139.16	0.0085	0.0032
Mercury	120887-04-07 14:07 G	45874226.99	45874227.09	45874227.20	0.0085	0.0049
Mercury	120887-07-04 15:05 G	45874315.06	45874315.13	45874315.22	0.0084	0.0066
Mercury	120887-09-30 16:17 G	45874403.17	45874403.18	45874403.22	0.0084	0.0082
Venus	120893-02-24 11:58 G	45876376.82	45876377.00	45876377.20	0.0082	0.0044
Venus	120893-10-07 23:43 G	45876602.30	45876602.49	45876602.70	0.0081	0.0036
Earth	120900-01-07 17:29 G	45878884.98	45878885.23	45878885.50	0.0078	0.0019
Moon	120900-01-07 19:38 G	45878885.07	45878885.32	45878885.58	0.0078	0.0015 *

# 122ND MILLENNIUM CE

**This is a list of transits visible from Pluto in the 122nd millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	121035-12-26 23:43	G	45928545.41	45928545.49	45928545.61	0.0059	0.0051	
Mercury	121036-03-24 00:55	G	45928633.43	45928633.54	45928633.70	0.0059	0.0043	
Mercury	121036-06-20 02:50	G	45928721.46	45928721.62	45928721.78	0.0059	0.0034	
Mercury	121036-09-16 03:48	G	45928809.50	45928809.66	45928809.85	0.0059	0.0026	
Mercury	121036-12-13 05:14	G	45928897.54	45928897.72	45928897.92	0.0059	0.0018	
Mercury	121037-03-11 06:55	G	45928985.59	45928985.79	45928985.98	0.0059	0.0009	
Mercury	121037-06-07 08:07	G	45929073.64	45929073.84	45929074.04	0.0059	0.0001	
Mercury	121037-09-03 09:19	G	45929161.70	45929161.89	45929162.09	0.0059	0.0008	
Mercury	121037-11-30 10:46	G	45929249.77	45929249.95	45929250.15	0.0059	0.0016	
Mercury	121038-02-26 11:43	G	45929337.83	45929337.99	45929338.19	0.0059	0.0025	
Mercury	121038-05-25 13:10	G	45929425.91	45929426.05	45929426.23	0.0059	0.0034	
Mercury	121038-08-21 15:05	G	45929513.99	45929514.13	45929514.26	0.0059	0.0042	
Mercury	121038-11-17 15:48	G	45929602.08	45929602.16	45929602.29	0.0059	0.0051	
Mercury	121039-02-13 17:14	G	45929690.22	45929690.22	45929690.26	0.0059	0.0059	
Venus	121049-09-24 07:53	G	45933565.69	45933565.83	45933566.00	0.0062	0.0044	
Venus	121050-05-07 11:14	G	45933790.76	45933790.97	45933791.19	0.0062	0.0010	
Venus	121050-12-18 14:07	G	45934015.91	45934016.09	45934016.31	0.0063	0.0025	
Venus	121051-07-31 17:29	G	45934241.17	45934241.23	45934241.31	0.0063	0.0059	
Mars	121058-11-24 01:10	G	45936913.24	45936913.55	45936913.87	0.0065	0.0004	
Moon	121060-07-12 15:19	G	45937509.88	45937510.14	45937510.40	0.0066	0.0006	
Earth	121060-07-12 18:26	G	45937510.03	45937510.27	45937510.53	0.0066	0.0010	*
Mercury	121133-08-28 14:07	G	45964219.01	45964219.09	45964219.17	0.0085	0.0069	

Mercury	121133-11-24 15:19 G	45964307.04	45964307.14	45964307.25	0.0085	0.0051
Mercury	121134-02-20 16:31 G	45964395.07	45964395.19	45964395.31	0.0085	0.0034
Mercury	121134-05-19 17:43 G	45964483.12	45964483.24	45964483.38	0.0085	0.0017
Mercury	121134-08-15 19:10 G	45964571.17	45964571.30	45964571.43	0.0085	0.0001
Mercury	121134-11-11 20:22 G	45964659.22	45964659.35	45964659.48	0.0085	0.0017
Mercury	121135-02-07 21:34 G	45964747.28	45964747.40	45964747.52	0.0085	0.0034
Mercury	121135-05-06 22:46 G	45964835.35	45964835.45	45964835.56	0.0085	0.0050
Mercury	121135-08-02 23:43 G	45964923.42	45964923.49	45964923.58	0.0084	0.0068
Mercury	121135-10-30 01:10 G	45965011.54	45965011.55	45965011.57	0.0084	0.0084
Venus	121141-01-30 16:17 G	45966931.06	45966931.18	45966931.35	0.0082	0.0062
Venus	121141-09-13 04:17 G	45967156.48	45967156.68	45967156.91	0.0081	0.0019
Moon	121148-01-12 01:38 G	45969468.32	45969468.57	45969468.83	0.0078	0.0011
Earth	121148-01-12 03:19 G	45969468.38	45969468.64	45969468.90	0.0078	0.0007 *
Mercury	121283-10-27 05:14 G	46019065.69	46019065.72	46019065.78	0.0059	0.0057
Mercury	121284-01-23 06:26 G	46019153.68	46019153.77	46019153.90	0.0059	0.0049
Mercury	121284-04-20 07:38 G	46019241.70	46019241.82	46019241.98	0.0059	0.0041
Mercury	121284-07-17 08:50 G	46019329.73	46019329.87	46019330.06	0.0059	0.0033
Mercury	121284-10-13 10:31 G	46019417.77	46019417.94	46019418.13	0.0059	0.0024
Mercury	121285-01-09 11:57 G	46019505.82	46019506.00	46019506.20	0.0059	0.0016
Mercury	121285-04-07 13:09 G	46019593.87	46019594.05	46019594.26	0.0059	0.0008
Mercury	121285-07-04 14:50 G	46019681.92	46019682.12	46019682.32	0.0059	0.0001
Mercury	121285-09-30 15:48 G	46019769.98	46019770.16	46019770.37	0.0059	0.0010
Mercury	121285-12-27 17:14 G	46019858.04	46019858.22	46019858.42	0.0059	0.0018
Mercury	121286-03-25 18:41 G	46019946.11	46019946.28	46019946.46	0.0059	0.0026
Mercury	121286-06-21 19:38 G	46020034.18	46020034.32	46020034.50	0.0059	0.0035
Mercury	121286-09-17 21:19 G	46020122.27	46020122.39	46020122.53	0.0059	0.0043
Mercury	121286-12-14 22:17 G	46020210.36	46020210.43	46020210.55	0.0059	0.0052
Venus	121297-08-28 14:50 G	46024120.02	46024120.12	46024120.26	0.0062	0.0051
Venus	121298-04-10 18:26 G	46024345.07	46024345.27	46024345.48	0.0062	0.0017
Venus	121298-11-21 21:33 G	46024570.19	46024570.40	46024570.61	0.0062	0.0017

Venus	121299-07-05 00:26 G	46024795.41	46024795.52	46024795.66	0.0063	0.0051
Mars	121307-03-05 17:43 G	46027594.92	46027595.24	46027595.56	0.0065	0.0000
Moon	121308-07-16 05:00 G	46028093.46	46028093.71	46028093.98	0.0066	0.0006
Earth	121308-07-16 05:43 G	46028093.49	46028093.74	46028094.00	0.0066	0.0002 *
Mercury	121381-06-28 21:19 G	46054739.38	46054739.39	46054739.40	0.0085	0.0085
Mercury	121381-09-24 22:31 G	46054827.37	46054827.44	46054827.52	0.0085	0.0067
Mercury	121381-12-21 23:43 G	46054915.39	46054915.49	46054915.60	0.0085	0.0050
Mercury	121382-03-20 00:55 G	46055003.43	46055003.54	46055003.67	0.0085	0.0033
Mercury	121382-06-16 02:21 G	46055091.47	46055091.60	46055091.73	0.0085	0.0016
Mercury	121382-09-12 03:33 G	46055179.52	46055179.65	46055179.79	0.0085	0.0002
Mercury	121382-12-09 04:45 G	46055267.58	46055267.70	46055267.83	0.0085	0.0018
Mercury	121383-03-07 05:57 G	46055355.64	46055355.75	46055355.88	0.0085	0.0035
Mercury	121383-06-03 07:09 G	46055443.70	46055443.80	46055443.91	0.0085	0.0052
Mercury	121383-08-30 08:07 G	46055531.78	46055531.84	46055531.93	0.0084	0.0069
Venus	121389-01-03 20:50 G	46057485.37	46057485.37	46057485.40	0.0082	0.0082
Venus	121389-08-17 08:50 G	46057710.65	46057710.87	46057711.10	0.0081	0.0003
Venus	121390-03-30 20:07 G	46057936.28	46057936.34	46057936.43	0.0081	0.0076
Moon	121396-01-14 08:36 G	46060051.61	46060051.86	46060052.13	0.0078	0.0010
Earth	121396-01-14 12:12 G	46060051.75	46060052.01	46060052.28	0.0078	0.0006 *
Mercury	121531-11-25 11:29 G	46109673.94	46109673.98	46109674.05	0.0058	0.0056
Mercury	121532-02-21 12:41 G	46109761.94	46109762.03	46109762.16	0.0059	0.0048
Mercury	121532-05-19 14:07 G	46109849.96	46109850.09	46109850.25	0.0059	0.0040
Mercury	121532-08-15 15:19 G	46109937.99	46109938.14	46109938.32	0.0059	0.0032
Mercury	121532-11-11 17:00 G	46110026.03	46110026.21	46110026.39	0.0059	0.0023
Mercury	121533-02-07 18:12 G	46110114.08	46110114.26	46110114.46	0.0059	0.0015
Mercury	121533-05-06 19:38 G	46110202.13	46110202.32	46110202.52	0.0059	0.0007
Mercury	121533-08-02 21:05 G	46110290.18	46110290.38	46110290.58	0.0059	0.0002
Mercury	121533-10-29 22:17 G	46110378.24	46110378.43	46110378.63	0.0059	0.0010
Mercury	121534-01-25 23:14 G	46110466.30	46110466.47	46110466.68	0.0059	0.0019
Mercury	121534-04-24 00:41 G	46110554.37	46110554.53	46110554.72	0.0059	0.0027

Mercury	121534-07-21 02:21 G	46110642.44	46110642.60	46110642.76	0.0059	0.0035
Mercury	121534-10-17 03:19 G	46110730.53	46110730.64	46110730.79	0.0059	0.0044
Mercury	121535-01-13 04:45 G	46110818.63	46110818.70	46110818.80	0.0059	0.0053
Venus	121545-08-03 21:19 G	46114674.38	46114674.39	46114674.47	0.0062	0.0061
Venus	121546-03-17 00:55 G	46114899.36	46114899.54	46114899.75	0.0062	0.0027
Venus	121546-10-28 04:17 G	46115124.46	46115124.68	46115124.90	0.0062	0.0007
Venus	121547-06-10 07:09 G	46115349.65	46115349.80	46115349.98	0.0063	0.0041
Mars	121555-06-15 08:07 G	46118276.53	46118276.84	46118277.16	0.0065	0.0009
Earth	121556-07-19 15:19 G	46118676.90	46118677.14	46118677.40	0.0066	0.0009
Moon	121556-07-19 17:57 G	46118676.99	46118677.25	46118677.51	0.0066	0.0012 *
Mercury	121629-10-23 06:12 G	46145435.70	46145435.76	46145435.84	0.0085	0.0073
Mercury	121630-01-19 07:38 G	46145523.72	46145523.82	46145523.92	0.0085	0.0055
Mercury	121630-04-17 08:50 G	46145611.76	46145611.87	46145612.00	0.0085	0.0038
Mercury	121630-07-14 10:17 G	46145699.80	46145699.93	46145700.06	0.0085	0.0021
Mercury	121630-10-10 11:29 G	46145787.85	46145787.98	46145788.11	0.0085	0.0004
Mercury	121631-01-06 12:41 G	46145875.90	46145876.03	46145876.16	0.0085	0.0013
Mercury	121631-04-04 13:53 G	46145963.96	46145964.08	46145964.21	0.0085	0.0030
Mercury	121631-07-01 15:05 G	46146052.02	46146052.13	46146052.24	0.0085	0.0047
Mercury	121631-09-27 16:02 G	46146140.10	46146140.17	46146140.27	0.0084	0.0064
Mercury	121631-12-24 17:29 G	46146228.19	46146228.23	46146228.28	0.0084	0.0080
Venus	121637-07-22 10:31 G	46148264.74	46148264.94	46148265.15	0.0081	0.0033
Venus	121638-03-04 22:02 G	46148490.24	46148490.42	46148490.61	0.0081	0.0046
Moon	121644-01-17 14:07 G	46150634.87	46150635.09	46150635.37	0.0078	0.0030
Earth	121644-01-17 16:45 G	46150634.98	46150635.20	46150635.46	0.0078	0.0033 *
Mercury	121779-12-22 17:29 G	46200282.20	46200282.23	46200282.29	0.0058	0.0057
Mercury	121780-03-19 18:41 G	46200370.19	46200370.28	46200370.41	0.0059	0.0049
Mercury	121780-06-15 19:53 G	46200458.21	46200458.33	46200458.49	0.0059	0.0041
Mercury	121780-09-11 21:19 G	46200546.24	46200546.39	46200546.57	0.0059	0.0033
Mercury	121780-12-08 23:00 G	46200634.28	46200634.46	46200634.64	0.0059	0.0024
Mercury	121781-03-07 00:12 G	46200722.33	46200722.51	46200722.71	0.0059	0.0016

Mercury	121781-06-03 01:38 G	46200810.38	46200810.57	46200810.77	0.0059	0.0008
Mercury	121781-08-30 03:05 G	46200898.43	46200898.63	46200898.82	0.0059	0.0001
Mercury	121781-11-26 04:17 G	46200986.49	46200986.68	46200986.88	0.0059	0.0009
Mercury	121782-02-22 05:43 G	46201074.55	46201074.74	46201074.93	0.0059	0.0017
Mercury	121782-05-21 06:41 G	46201162.62	46201162.78	46201162.97	0.0059	0.0026
Mercury	121782-08-17 08:07 G	46201250.69	46201250.84	46201251.01	0.0059	0.0034
Mercury	121782-11-13 09:05 G	46201338.77	46201338.88	46201339.04	0.0059	0.0043
Mercury	121783-02-09 10:31 G	46201426.87	46201426.94	46201427.06	0.0059	0.0052
Venus	121794-02-18 06:26 G	46205453.63	46205453.77	46205453.97	0.0062	0.0040
Venus	121794-10-01 10:02 G	46205678.71	46205678.92	46205679.14	0.0062	0.0006
Venus	121795-05-14 13:24 G	46205903.87	46205904.06	46205904.25	0.0063	0.0028
Venus	121795-12-25 16:02 G	46206129.17	46206129.17	46206129.21	0.0063	0.0063
Mars	121803-09-24 20:50 G	46208958.08	46208958.37	46208958.69	0.0065	0.0021
Earth	121804-07-22 23:57 G	46209260.28	46209260.50	46209260.75	0.0066	0.0023
Moon	121804-07-23 02:36 G	46209260.37	46209260.61	46209260.86	0.0066	0.0022 *
Mercury	121877-11-20 14:21 G	46236044.05	46236044.10	46236044.17	0.0085	0.0075
Mercury	121878-02-16 15:33 G	46236132.06	46236132.15	46236132.26	0.0085	0.0058
Mercury	121878-05-15 16:45 G	46236220.10	46236220.20	46236220.33	0.0085	0.0042
Mercury	121878-08-11 18:12 G	46236308.14	46236308.26	46236308.39	0.0085	0.0024
Mercury	121878-11-07 19:38 G	46236396.18	46236396.32	46236396.45	0.0085	0.0007
Mercury	121879-02-03 20:50 G	46236484.24	46236484.37	46236484.50	0.0085	0.0010
Mercury	121879-05-02 22:02 G	46236572.29	46236572.42	46236572.54	0.0085	0.0027
Mercury	121879-07-29 23:00 G	46236660.36	46236660.46	46236660.58	0.0085	0.0044
Mercury	121879-10-26 00:26 G	46236748.43	46236748.52	46236748.61	0.0084	0.0060
Mercury	121880-01-22 01:24 G	46236836.52	46236836.56	46236836.62	0.0084	0.0077
Venus	121885-06-26 12:55 G	46238818.90	46238819.04	46238819.20	0.0082	0.0061
Venus	121886-02-07 00:26 G	46239044.32	46239044.52	46239044.75	0.0081	0.0019
Moon	121892-01-20 19:38 G	46241218.14	46241218.32	46241218.53	0.0078	0.0053
Earth	121892-01-20 22:45 G	46241218.30	46241218.45	46241218.66	0.0078	0.0057 *

# 123RD MILLENNIUM CE

**This is a list of transits visible from Pluto in the 123rd millennium CE.**

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	122028-04-17 00:26	G	46290978.43	46290978.52	46290978.62	0.0058	0.0051	
Mercury	122028-07-14 01:38	G	46291066.45	46291066.57	46291066.72	0.0059	0.0043	
Mercury	122028-10-10 02:50	G	46291154.48	46291154.62	46291154.79	0.0059	0.0035	
Mercury	122029-01-06 04:17	G	46291242.52	46291242.68	46291242.87	0.0059	0.0027	
Mercury	122029-04-04 05:29	G	46291330.56	46291330.73	46291330.93	0.0059	0.0019	
Mercury	122029-07-01 07:09	G	46291418.61	46291418.80	46291418.99	0.0059	0.0010	
Mercury	122029-09-27 08:36	G	46291506.66	46291506.86	46291507.05	0.0059	0.0002	
Mercury	122029-12-24 09:33	G	46291594.71	46291594.90	46291595.11	0.0059	0.0007	
Mercury	122030-03-22 11:00	G	46291682.78	46291682.96	46291683.16	0.0059	0.0015	
Mercury	122030-06-18 12:12	G	46291770.84	46291771.01	46291771.20	0.0059	0.0023	
Mercury	122030-09-14 13:53	G	46291858.91	46291859.08	46291859.24	0.0059	0.0031	
Mercury	122030-12-11 14:36	G	46291946.99	46291947.11	46291947.28	0.0059	0.0040	
Mercury	122031-03-09 16:17	G	46292035.08	46292035.18	46292035.30	0.0059	0.0048	
Mercury	122031-06-05 17:14	G	46292123.19	46292123.22	46292123.30	0.0059	0.0057	
Venus	122042-01-23 11:29	G	46296007.91	46296007.98	46296008.11	0.0062	0.0055	
Venus	122042-09-05 15:05	G	46296232.94	46296233.13	46296233.34	0.0062	0.0021	
Venus	122043-04-18 18:12	G	46296458.06	46296458.26	46296458.49	0.0062	0.0013	
Venus	122043-11-29 21:05	G	46296683.26	46296683.38	46296683.55	0.0063	0.0047	
Mars	122052-01-03 07:09	G	46299639.56	46299639.80	46299640.07	0.0065	0.0040	



Earth	122052-07-25 07:38 G	46299843.62	46299843.82	46299844.01	0.0066	0.0042
Moon	122052-07-25 07:24 G	46299843.62	46299843.81	46299844.05	0.0066	0.0039 *
Earth	122053-07-26 20:07 G	46300210.16	46300210.34	46300210.51	0.0066	0.0048
Moon	122053-07-26 21:19 G	46300210.21	46300210.39	46300210.58	0.0066	0.0044 *
Mercury	122126-03-16 22:45 G	46326740.38	46326740.45	46326740.54	0.0085	0.0069
Mercury	122126-06-13 00:12 G	46326828.41	46326828.51	46326828.62	0.0085	0.0051
Mercury	122126-09-09 01:24 G	46326916.44	46326916.56	46326916.69	0.0085	0.0034
Mercury	122126-12-06 02:50 G	46327004.49	46327004.62	46327004.75	0.0085	0.0017
Mercury	122127-03-04 04:02 G	46327092.54	46327092.67	46327092.80	0.0085	0.0001
Mercury	122127-05-31 05:14 G	46327180.59	46327180.72	46327180.85	0.0085	0.0017
Mercury	122127-08-27 06:26 G	46327268.65	46327268.77	46327268.89	0.0085	0.0033
Mercury	122127-11-23 07:38 G	46327356.72	46327356.82	46327356.93	0.0085	0.0050
Mercury	122128-02-19 08:36 G	46327444.79	46327444.86	46327444.95	0.0084	0.0067
Mercury	122128-05-17 10:02 G	46327532.90	46327532.92	46327532.95	0.0084	0.0083
Venus	122134-01-11 23:57 G	46329598.29	46329598.50	46329598.72	0.0081	0.0023
Venus	122134-08-25 11:43 G	46329823.82	46329823.99	46329824.15	0.0081	0.0055
Earth	122141-01-25 03:48 G	46332168.52	46332168.66	46332168.85	0.0078	0.0061
Moon	122141-01-25 06:26 G	46332168.64	46332168.77	46332168.95	0.0078	0.0064 *
Mercury	122276-05-15 05:29 G	46381586.68	46381586.73	46381586.81	0.0058	0.0055
Mercury	122276-08-11 06:41 G	46381674.68	46381674.78	46381674.91	0.0058	0.0047
Mercury	122276-11-07 07:53 G	46381762.70	46381762.83	46381763.00	0.0059	0.0039
Mercury	122277-02-03 09:19 G	46381850.74	46381850.89	46381851.07	0.0059	0.0031
Mercury	122277-05-02 10:31 G	46381938.78	46381938.94	46381939.14	0.0059	0.0023
Mercury	122277-07-29 12:12 G	46382026.82	46382027.01	46382027.21	0.0059	0.0014
Mercury	122277-10-25 13:38 G	46382114.87	46382115.07	46382115.27	0.0059	0.0006
Mercury	122278-01-21 14:50 G	46382202.93	46382203.12	46382203.32	0.0059	0.0003
Mercury	122278-04-19 16:02 G	46382290.99	46382291.17	46382291.37	0.0059	0.0011
Mercury	122278-07-16 17:29 G	46382379.05	46382379.23	46382379.42	0.0059	0.0019
Mercury	122278-10-12 18:41 G	46382467.12	46382467.28	46382467.47	0.0059	0.0027
Mercury	122279-01-08 19:38 G	46382555.19	46382555.32	46382555.50	0.0059	0.0036

Mercury	122279-04-06 21:05 G	46382643.27	46382643.38	46382643.53	0.0059	0.0045
Mercury	122279-07-03 22:45 G	46382731.37	46382731.45	46382731.55	0.0059	0.0053
Venus	122290-08-10 19:24 G	46386787.16	46386787.31	46386787.50	0.0062	0.0039
Venus	122291-03-23 23:00 G	46387012.24	46387012.46	46387012.68	0.0062	0.0005
Venus	122291-11-04 01:38 G	46387237.40	46387237.57	46387237.78	0.0063	0.0029
Venus	122292-06-16 05:14 G	46387462.72	46387462.72	46387462.73	0.0063	0.0063
Mars	122300-04-14 14:21 G	46390321.02	46390321.10	46390321.23	0.0065	0.0062
Moon	122300-07-29 09:19 G	46390426.83	46390426.89	46390427.02	0.0066	0.0061
Earth	122300-07-29 13:09 G	46390427.02	46390427.05	46390427.13	0.0066	0.0064 *
Earth	122301-07-31 01:24 G	46390793.35	46390793.56	46390793.82	0.0066	0.0026
Moon	122301-07-31 03:48 G	46390793.43	46390793.66	46390793.92	0.0066	0.0022 *
Mercury	122374-04-14 05:57 G	46417348.71	46417348.75	46417348.81	0.0085	0.0078
Mercury	122374-07-11 07:24 G	46417436.72	46417436.81	46417436.91	0.0085	0.0060
Mercury	122374-10-07 08:36 G	46417524.75	46417524.86	46417524.98	0.0085	0.0043
Mercury	122375-01-03 10:02 G	46417612.80	46417612.92	46417613.05	0.0085	0.0026
Mercury	122375-04-01 11:14 G	46417700.84	46417700.97	46417701.11	0.0085	0.0009
Mercury	122375-06-28 12:41 G	46417788.89	46417789.03	46417789.16	0.0085	0.0008
Mercury	122375-09-24 13:38 G	46417876.95	46417877.07	46417877.20	0.0085	0.0025
Mercury	122375-12-21 15:05 G	46417965.01	46417965.13	46417965.24	0.0085	0.0041
Mercury	122376-03-18 16:02 G	46418053.09	46418053.17	46418053.28	0.0084	0.0058
Mercury	122376-06-14 17:14 G	46418141.17	46418141.22	46418141.29	0.0084	0.0074
Venus	122381-12-16 23:57 G	46420152.36	46420152.50	46420152.65	0.0082	0.0062
Venus	122382-07-30 11:43 G	46420377.77	46420377.99	46420378.21	0.0081	0.0016
Moon	122389-01-28 04:31 G	46422751.45	46422751.69	46422751.94	0.0078	0.0025
Earth	122389-01-28 06:41 G	46422751.55	46422751.78	46422752.04	0.0078	0.0026 *
Mercury	122524-09-08 11:14 G	46472282.91	46472282.97	46472283.08	0.0058	0.0053
Mercury	122524-12-05 12:26 G	46472370.92	46472371.02	46472371.17	0.0058	0.0045
Mercury	122525-03-03 13:53 G	46472458.95	46472459.08	46472459.25	0.0059	0.0037
Mercury	122525-05-30 15:05 G	46472546.98	46472547.13	46472547.33	0.0059	0.0029
Mercury	122525-08-26 16:31 G	46472635.02	46472635.19	46472635.39	0.0059	0.0021

Mercury	122525-11-22 18:12 G	46472723.07	46472723.26	46472723.46	0.0059	0.0012
Mercury	122526-02-18 19:38 G	46472811.12	46472811.32	46472811.51	0.0059	0.0004
Mercury	122526-05-17 20:50 G	46472899.18	46472899.37	46472899.57	0.0059	0.0004
Mercury	122526-08-13 22:02 G	46472987.23	46472987.42	46472987.62	0.0059	0.0013
Mercury	122526-11-09 23:14 G	46473075.30	46473075.47	46473075.67	0.0059	0.0021
Mercury	122527-02-06 00:41 G	46473163.37	46473163.53	46473163.71	0.0059	0.0029
Mercury	122527-05-05 02:07 G	46473251.44	46473251.59	46473251.75	0.0059	0.0037
Mercury	122527-08-01 03:05 G	46473339.53	46473339.63	46473339.77	0.0059	0.0046
Mercury	122527-10-28 04:31 G	46473427.63	46473427.69	46473427.78	0.0059	0.0054
Venus	122538-07-15 22:31 G	46477341.41	46477341.44	46477341.52	0.0062	0.0060
Venus	122539-02-26 01:38 G	46477566.39	46477566.57	46477566.78	0.0062	0.0027
Venus	122539-10-09 05:00 G	46477791.50	46477791.71	46477791.93	0.0062	0.0007
Venus	122540-05-21 07:53 G	46478016.69	46478016.83	46478017.02	0.0063	0.0041
Moon	122549-08-02 03:33 G	46481376.40	46481376.65	46481376.90	0.0066	0.0006
Earth	122549-08-02 05:43 G	46481376.49	46481376.74	46481377.00	0.0066	0.0004 *
Mercury	122622-08-08 13:24 G	46508045.03	46508045.06	46508045.13	0.0085	0.0079
Mercury	122622-11-04 14:50 G	46508133.04	46508133.12	46508133.22	0.0085	0.0061
Mercury	122623-01-31 16:02 G	46508221.07	46508221.17	46508221.30	0.0085	0.0045
Mercury	122623-04-29 17:29 G	46508309.11	46508309.23	46508309.36	0.0085	0.0027
Mercury	122623-07-26 18:55 G	46508397.16	46508397.29	46508397.42	0.0085	0.0010
Mercury	122623-10-22 20:07 G	46508485.21	46508485.34	46508485.47	0.0085	0.0007
Mercury	122624-01-18 21:19 G	46508573.27	46508573.39	46508573.52	0.0085	0.0024
Mercury	122624-04-15 22:31 G	46508661.33	46508661.44	46508661.56	0.0085	0.0040
Mercury	122624-07-12 23:43 G	46508749.40	46508749.49	46508749.59	0.0084	0.0057
Mercury	122624-10-09 00:41 G	46508837.48	46508837.53	46508837.61	0.0084	0.0074
Venus	122630-07-04 07:38 G	46510931.64	46510931.82	46510932.04	0.0081	0.0039
Venus	122631-02-14 19:24 G	46511157.12	46511157.31	46511157.52	0.0081	0.0039
Jupiter	122634-10-08 02:50 G	46512488.62	46512488.62	46512488.71	0.0079	0.0079
Earth	122637-01-31 02:50 G	46513334.40	46513334.62	46513334.89	0.0078	0.0029
Moon	122637-01-31 05:57 G	46513334.51	46513334.75	46513335.01	0.0078	0.0032 *

Mercury	122773-01-02 17:00 G	46562979.13	46562979.21	46562979.31	0.0058	0.0052
Mercury	122773-03-31 18:12 G	46563067.15	46563067.26	46563067.41	0.0058	0.0044
Mercury	122773-06-27 19:38 G	46563155.18	46563155.32	46563155.49	0.0059	0.0036
Mercury	122773-09-23 20:50 G	46563243.21	46563243.37	46563243.56	0.0059	0.0028
Mercury	122773-12-20 22:17 G	46563331.25	46563331.43	46563331.62	0.0059	0.0020
Mercury	122774-03-18 23:29 G	46563419.30	46563419.48	46563419.69	0.0059	0.0012
Mercury	122774-06-15 00:55 G	46563507.35	46563507.54	46563507.75	0.0059	0.0004
Mercury	122774-09-11 02:21 G	46563595.41	46563595.60	46563595.80	0.0059	0.0005
Mercury	122774-12-08 03:48 G	46563683.47	46563683.66	46563683.85	0.0059	0.0013
Mercury	122775-03-06 04:45 G	46563771.53	46563771.70	46563771.90	0.0059	0.0022
Mercury	122775-06-02 05:57 G	46563859.60	46563859.75	46563859.94	0.0059	0.0030
Mercury	122775-08-29 07:24 G	46563947.68	46563947.81	46563947.98	0.0059	0.0038
Mercury	122775-11-25 08:50 G	46564035.76	46564035.87	46564036.00	0.0059	0.0046
Mercury	122776-02-21 09:48 G	46564123.87	46564123.91	46564124.01	0.0059	0.0055
Venus	122787-01-31 04:31 G	46568120.59	46568120.69	46568120.84	0.0062	0.0050
Venus	122787-09-13 07:38 G	46568345.63	46568345.82	46568346.05	0.0062	0.0018
Venus	122788-04-25 11:00 G	46568570.76	46568570.96	46568571.18	0.0062	0.0017
Venus	122788-12-06 13:53 G	46568795.98	46568796.08	46568796.23	0.0063	0.0051
Earth	122797-08-05 08:21 G	46571959.65	46571959.85	46571960.09	0.0066	0.0035
Moon	122797-08-05 11:00 G	46571959.76	46571959.96	46571960.21	0.0066	0.0034 *
Moon	122798-08-06 20:07 G	46572326.22	46572326.34	46572326.50	0.0066	0.0055
Earth	122798-08-06 20:36 G	46572326.26	46572326.36	46572326.53	0.0066	0.0056 *
Mercury	122870-12-01 21:19 G	46598741.34	46598741.39	46598741.45	0.0085	0.0078
Mercury	122871-02-27 22:31 G	46598829.36	46598829.44	46598829.54	0.0085	0.0061
Mercury	122871-05-26 23:57 G	46598917.39	46598917.50	46598917.62	0.0085	0.0043
Mercury	122871-08-23 01:24 G	46599005.43	46599005.56	46599005.68	0.0085	0.0027
Mercury	122871-11-19 02:36 G	46599093.48	46599093.61	46599093.74	0.0085	0.0010
Mercury	122872-02-15 03:48 G	46599181.53	46599181.66	46599181.79	0.0085	0.0007
Mercury	122872-05-13 05:00 G	46599269.59	46599269.71	46599269.84	0.0085	0.0024
Mercury	122872-08-09 06:12 G	46599357.65	46599357.76	46599357.88	0.0085	0.0041

Mercury	122872-11-05 07:09 G	46599445.72	46599445.80	46599445.91	0.0085	0.0058
Mercury	122873-02-01 08:36 G	46599533.81	46599533.86	46599533.93	0.0084	0.0074
Venus	122879-01-18 16:17 G	46601710.96	46601711.18	46601711.41	0.0081	0.0013
Venus	122879-09-01 03:19 G	46601936.53	46601936.64	46601936.80	0.0081	0.0065
Earth	122886-02-04 04:02 G	46604284.64	46604284.67	46604284.76	0.0078	0.0076

# 124TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 124th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	123021-04-28 22:17 G	46653675.35	46653675.43	46653675.51	0.0058	0.0053		
Mercury	123021-07-25 23:00 G	46653763.36	46653763.46	46653763.61	0.0058	0.0046		
Mercury	123021-10-22 00:26 G	46653851.39	46653851.52	46653851.69	0.0058	0.0037		
Mercury	123022-01-18 02:21 G	46653939.43	46653939.60	46653939.77	0.0058	0.0029		
Mercury	123022-04-16 03:33 G	46654027.47	46654027.65	46654027.83	0.0059	0.0021		
Mercury	123022-07-13 04:45 G	46654115.51	46654115.70	46654115.90	0.0059	0.0013		
Mercury	123022-10-09 06:12 G	46654203.56	46654203.76	46654203.95	0.0059	0.0005		
Mercury	123023-01-05 07:24 G	46654291.62	46654291.81	46654292.01	0.0059	0.0004		
Mercury	123023-04-03 08:36 G	46654379.68	46654379.86	46654380.06	0.0059	0.0012		
Mercury	123023-06-30 09:48 G	46654467.74	46654467.91	46654468.11	0.0059	0.0020		
Mercury	123023-09-26 11:14 G	46654555.81	46654555.97	46654556.15	0.0059	0.0028		
Mercury	123023-12-23 12:26 G	46654643.88	46654644.02	46654644.19	0.0059	0.0036		
Mercury	123024-03-20 14:07 G	46654731.96	46654732.09	46654732.22	0.0059	0.0044		

Mercury	123024-06-16 14:50 G	46654820.06	46654820.12	46654820.23	0.0059	0.0053
Venus	123035-08-18 09:05 G	46658899.74	46658899.88	46658900.04	0.0062	0.0045
Venus	123036-03-30 12:12 G	46659124.81	46659125.01	46659125.23	0.0062	0.0012
Venus	123036-11-10 15:05 G	46659349.95	46659350.13	46659350.35	0.0062	0.0023
Venus	123037-06-23 18:26 G	46659575.19	46659575.27	46659575.38	0.0063	0.0056
Earth	123046-08-09 21:05 G	46662909.15	46662909.38	46662909.65	0.0066	0.0017
Moon	123046-08-09 23:43 G	46662909.24	46662909.49	46662909.75	0.0066	0.0013 *
Mars	123047-01-03 02:50 G	46663055.43	46663055.62	46663055.87	0.0066	0.0048
Mercury	123119-06-25 05:00 G	46689525.65	46689525.71	46689525.80	0.0085	0.0070
Mercury	123119-09-21 06:26 G	46689613.67	46689613.77	46689613.88	0.0085	0.0052
Mercury	123119-12-18 07:53 G	46689701.71	46689701.83	46689701.95	0.0085	0.0035
Mercury	123120-03-15 09:05 G	46689789.76	46689789.88	46689790.01	0.0085	0.0018
Mercury	123120-06-11 10:31 G	46689877.80	46689877.94	46689878.07	0.0085	0.0002
Mercury	123120-09-07 11:43 G	46689965.86	46689965.99	46689966.12	0.0085	0.0015
Mercury	123120-12-04 12:55 G	46690053.92	46690054.04	46690054.16	0.0085	0.0032
Mercury	123121-03-02 14:07 G	46690141.99	46690142.09	46690142.20	0.0085	0.0049
Mercury	123121-05-29 15:05 G	46690230.06	46690230.13	46690230.23	0.0084	0.0066
Mercury	123121-08-25 16:31 G	46690318.16	46690318.19	46690318.23	0.0084	0.0081
Venus	123126-12-24 09:05 G	46692264.88	46692264.88	46692264.91	0.0082	0.0081
Venus	123127-08-06 21:05 G	46692490.15	46692490.38	46692490.60	0.0081	0.0004
Venus	123128-03-19 08:21 G	46692715.76	46692715.85	46692715.95	0.0081	0.0073
Moon	123134-02-07 17:43 G	46694866.98	46694867.24	46694867.50	0.0078	0.0006
Earth	123134-02-07 20:21 G	46694867.09	46694867.35	46694867.62	0.0078	0.0005 *
Mars	123134-05-05 10:02 G	46694953.63	46694953.92	46694954.24	0.0078	0.0018
Mercury	123269-08-22 02:21 G	46744371.57	46744371.60	46744371.69	0.0058	0.0056
Mercury	123269-11-18 03:48 G	46744459.57	46744459.66	46744459.80	0.0058	0.0048
Mercury	123270-02-14 05:14 G	46744547.60	46744547.72	46744547.89	0.0058	0.0040
Mercury	123270-05-13 06:41 G	46744635.63	46744635.78	46744635.96	0.0058	0.0032
Mercury	123270-08-09 07:53 G	46744723.67	46744723.83	46744724.03	0.0059	0.0024
Mercury	123270-11-05 09:19 G	46744811.71	46744811.89	46744812.09	0.0059	0.0016

Mercury	123271-02-01 10:45 G	46744899.76	46744899.95	46744900.15	0.0059	0.0008
Mercury	123271-04-30 12:12 G	46744987.82	46744988.01	46744988.21	0.0059	0.0001
Mercury	123271-07-27 13:38 G	46745075.87	46745076.07	46745076.26	0.0059	0.0009
Mercury	123271-10-23 14:50 G	46745163.94	46745164.12	46745164.31	0.0059	0.0017
Mercury	123272-01-19 15:48 G	46745252.00	46745252.16	46745252.36	0.0059	0.0026
Mercury	123272-04-16 17:00 G	46745340.07	46745340.21	46745340.40	0.0059	0.0034
Mercury	123272-07-13 18:26 G	46745428.15	46745428.27	46745428.43	0.0059	0.0042
Mercury	123272-10-09 19:53 G	46745516.24	46745516.33	46745516.45	0.0059	0.0050
Mercury	123273-01-05 21:33 G	46745604.38	46745604.40	46745604.42	0.0059	0.0059
Venus	123284-03-03 13:24 G	46749678.91	46749679.06	46749679.25	0.0062	0.0040
Venus	123284-10-14 16:45 G	46749903.99	46749904.20	46749904.42	0.0062	0.0006
Venus	123285-05-27 19:38 G	46750129.15	46750129.32	46750129.54	0.0062	0.0028
Venus	123286-01-07 23:00 G	46750354.43	46750354.46	46750354.52	0.0063	0.0061
Moon	123294-08-11 18:12 G	46753492.05	46753492.26	46753492.51	0.0066	0.0026
Earth	123294-08-11 21:48 G	46753492.18	46753492.41	46753492.66	0.0066	0.0022 *
Mars	123295-04-12 22:02 G	46753736.11	46753736.42	46753736.75	0.0066	0.0005
Mercury	123367-10-18 11:57 G	46780221.95	46780222.00	46780222.07	0.0085	0.0076
Mercury	123368-01-14 13:24 G	46780309.97	46780310.06	46780310.16	0.0085	0.0058
Mercury	123368-04-11 14:36 G	46780398.01	46780398.11	46780398.24	0.0085	0.0042
Mercury	123368-07-08 16:02 G	46780486.05	46780486.17	46780486.30	0.0085	0.0024
Mercury	123368-10-04 17:14 G	46780574.09	46780574.22	46780574.36	0.0085	0.0008
Mercury	123368-12-31 18:41 G	46780662.15	46780662.28	46780662.41	0.0085	0.0010
Mercury	123369-03-29 19:53 G	46780750.21	46780750.33	46780750.46	0.0085	0.0026
Mercury	123369-06-25 21:05 G	46780838.27	46780838.38	46780838.50	0.0085	0.0043
Mercury	123369-09-21 22:02 G	46780926.34	46780926.42	46780926.53	0.0085	0.0060
Mercury	123369-12-18 23:29 G	46781014.43	46781014.48	46781014.54	0.0084	0.0075
Venus	123375-07-10 14:21 G	46783044.00	46783044.10	46783044.25	0.0082	0.0068
Venus	123376-02-21 02:36 G	46783269.39	46783269.61	46783269.83	0.0081	0.0010
Earth	123382-02-09 13:09 G	46785449.90	46785450.05	46785450.23	0.0078	0.0060
Moon	123382-02-09 16:17 G	46785450.02	46785450.18	46785450.36	0.0078	0.0058 *

Mars	123382-08-13 07:38 G	46785634.56	46785634.82	46785635.10	0.0078	0.0039
Mercury	123518-03-15 08:07 G	46835155.78	46835155.84	46835155.96	0.0058	0.0052
Mercury	123518-06-11 09:33 G	46835243.79	46835243.90	46835244.05	0.0058	0.0044
Mercury	123518-09-07 11:00 G	46835331.82	46835331.96	46835332.13	0.0058	0.0036
Mercury	123518-12-04 12:12 G	46835419.86	46835420.01	46835420.20	0.0058	0.0028
Mercury	123519-03-02 13:38 G	46835507.90	46835508.07	46835508.27	0.0059	0.0020
Mercury	123519-05-29 15:05 G	46835595.95	46835596.13	46835596.33	0.0059	0.0012
Mercury	123519-08-25 16:31 G	46835684.00	46835684.19	46835684.39	0.0059	0.0003
Mercury	123519-11-21 17:57 G	46835772.05	46835772.25	46835772.44	0.0059	0.0005
Mercury	123520-02-17 19:09 G	46835860.11	46835860.30	46835860.50	0.0059	0.0013
Mercury	123520-05-15 20:21 G	46835948.18	46835948.35	46835948.54	0.0059	0.0021
Mercury	123520-08-11 21:48 G	46836036.24	46836036.41	46836036.58	0.0059	0.0029
Mercury	123520-11-07 23:14 G	46836124.32	46836124.47	46836124.62	0.0059	0.0037
Mercury	123521-02-03 23:57 G	46836212.40	46836212.50	46836212.65	0.0059	0.0046
Mercury	123521-05-03 01:24 G	46836300.50	46836300.56	46836300.66	0.0059	0.0054
Venus	123532-09-19 16:31 G	46840458.03	46840458.19	46840458.37	0.0062	0.0038
Venus	123533-05-02 19:53 G	46840683.12	46840683.33	46840683.55	0.0062	0.0006
Venus	123533-12-13 22:31 G	46840908.27	46840908.44	46840908.66	0.0062	0.0029
Venus	123534-07-27 01:38 G	46841133.56	46841133.57	46841133.63	0.0063	0.0062
Mars	123543-07-23 09:48 G	46844416.74	46844416.91	46844417.17	0.0066	0.0049
Moon	123543-08-17 04:45 G	46844441.48	46844441.70	46844441.96	0.0066	0.0026
Earth	123543-08-17 08:07 G	46844441.61	46844441.84	46844442.08	0.0066	0.0022 *
Mercury	123616-05-09 19:09 G	46871006.25	46871006.30	46871006.38	0.0085	0.0073
Mercury	123616-08-05 20:36 G	46871094.27	46871094.36	46871094.47	0.0085	0.0055
Mercury	123616-11-01 22:02 G	46871182.30	46871182.42	46871182.54	0.0085	0.0038
Mercury	123617-01-28 23:14 G	46871270.35	46871270.47	46871270.60	0.0085	0.0022
Mercury	123617-04-27 00:41 G	46871358.39	46871358.53	46871358.66	0.0085	0.0005
Mercury	123617-07-24 01:53 G	46871446.45	46871446.58	46871446.71	0.0085	0.0012
Mercury	123617-10-20 03:05 G	46871534.51	46871534.63	46871534.76	0.0085	0.0029
Mercury	123618-01-16 04:02 G	46871622.57	46871622.67	46871622.80	0.0085	0.0046



Mercury	123618-04-14 05:29 G	46871710.65	46871710.73	46871710.83	0.0084	0.0062
Mercury	123618-07-11 06:55 G	46871798.74	46871798.79	46871798.84	0.0084	0.0078
Venus	123624-01-25 16:31 G	46873823.10	46873823.19	46873823.34	0.0082	0.0069
Venus	123624-09-07 04:31 G	46874048.47	46874048.69	46874048.92	0.0081	0.0009
Earth	123631-02-14 05:00 G	46876399.46	46876399.71	46876399.98	0.0078	0.0013
Moon	123631-02-14 06:41 G	46876399.54	46876399.78	46876400.05	0.0078	0.0012 *
Mercury	123766-07-08 12:26 G	46925851.99	46925852.02	46925852.12	0.0058	0.0056
Mercury	123766-10-04 13:53 G	46925939.99	46925940.08	46925940.22	0.0058	0.0048
Mercury	123766-12-31 15:19 G	46926028.02	46926028.14	46926028.30	0.0058	0.0040
Mercury	123767-03-29 16:45 G	46926116.05	46926116.20	46926116.38	0.0058	0.0031
Mercury	123767-06-25 17:57 G	46926204.09	46926204.25	46926204.45	0.0058	0.0024
Mercury	123767-09-21 19:24 G	46926292.13	46926292.31	46926292.51	0.0059	0.0016
Mercury	123767-12-18 20:50 G	46926380.18	46926380.37	46926380.57	0.0059	0.0008
Mercury	123768-03-15 22:17 G	46926468.23	46926468.43	46926468.63	0.0059	0.0001
Mercury	123768-06-11 23:29 G	46926556.29	46926556.48	46926556.68	0.0059	0.0009
Mercury	123768-09-08 00:41 G	46926644.35	46926644.53	46926644.73	0.0059	0.0017
Mercury	123768-12-05 02:07 G	46926732.42	46926732.59	46926732.77	0.0059	0.0025
Mercury	123769-03-03 03:19 G	46926820.49	46926820.64	46926820.81	0.0059	0.0033
Mercury	123769-05-30 04:45 G	46926908.57	46926908.70	46926908.85	0.0059	0.0041
Mercury	123769-08-26 05:43 G	46926996.66	46926996.74	46926996.87	0.0059	0.0050
Mercury	123769-11-22 06:55 G	46927084.78	46927084.79	46927084.85	0.0059	0.0058
Venus	123781-04-05 19:53 G	46931237.18	46931237.33	46931237.53	0.0062	0.0037
Venus	123781-11-16 23:29 G	46931462.27	46931462.48	46931462.70	0.0062	0.0003
Venus	123782-06-30 02:21 G	46931687.43	46931687.60	46931687.81	0.0062	0.0031
Earth	123791-08-19 06:41 G	46935024.56	46935024.78	46935025.04	0.0066	0.0021
Moon	123791-08-19 08:36 G	46935024.63	46935024.86	46935025.11	0.0066	0.0017 *
Mercury	123864-09-03 01:38 G	46961702.55	46961702.57	46961702.62	0.0085	0.0083
Mercury	123864-11-30 03:05 G	46961790.55	46961790.63	46961790.72	0.0085	0.0065
Mercury	123865-02-26 04:17 G	46961878.58	46961878.68	46961878.80	0.0085	0.0048
Mercury	123865-05-25 05:43 G	46961966.62	46961966.74	46961966.87	0.0085	0.0031

Mercury	123865-08-21 07:09 G	46962054.67	46962054.80	46962054.93	0.0085	0.0014
Mercury	123865-11-17 08:21 G	46962142.72	46962142.85	46962142.98	0.0085	0.0003
Mercury	123866-02-13 09:33 G	46962230.78	46962230.90	46962231.03	0.0085	0.0019
Mercury	123866-05-12 10:45 G	46962318.84	46962318.95	46962319.08	0.0085	0.0036
Mercury	123866-08-08 11:57 G	46962406.91	46962407.00	46962407.11	0.0085	0.0052
Mercury	123866-11-04 13:09 G	46962494.98	46962495.05	46962495.14	0.0084	0.0069
Venus	123872-08-11 20:36 G	46964602.23	46964602.36	46964602.53	0.0082	0.0062
Venus	123873-03-25 08:36 G	46964827.64	46964827.86	46964828.08	0.0081	0.0016
Moon	123879-02-16 17:29 G	46966982.09	46966982.23	46966982.45	0.0078	0.0059
Earth	123879-02-16 18:55 G	46966982.16	46966982.29	46966982.49	0.0078	0.0061 *

# 125TH MILLENNIUM CE

This is a list of transits visible from Pluto in the 125th millennium CE.

PLANET	MAX- TRANSIT TIME	C	START	MAX	END	SUNRAD	DEPTH	S
Mercury	124015-01-28 17:57 G	47016636.19	47016636.25	47016636.36	0.0058	0.0052		
Mercury	124015-04-26 19:24 G	47016724.20	47016724.31	47016724.45	0.0058	0.0044		
Mercury	124015-07-23 20:50 G	47016812.23	47016812.37	47016812.53	0.0058	0.0037		
Mercury	124015-10-19 22:02 G	47016900.26	47016900.42	47016900.61	0.0058	0.0029		
Mercury	124016-01-15 23:29 G	47016988.31	47016988.48	47016988.67	0.0058	0.0021		
Mercury	124016-04-13 00:55 G	47017076.35	47017076.54	47017076.73	0.0059	0.0013		
Mercury	124016-07-10 02:21 G	47017164.40	47017164.60	47017164.79	0.0059	0.0005		
Mercury	124016-10-06 03:33 G	47017252.46	47017252.65	47017252.85	0.0059	0.0003		

Mercury	124017-01-02 04:45 G	47017340.51	47017340.70	47017340.90	0.0059	0.0012
Mercury	124017-03-31 05:57 G	47017428.58	47017428.75	47017428.95	0.0059	0.0020
Mercury	124017-06-27 07:09 G	47017516.64	47017516.80	47017516.99	0.0059	0.0028
Mercury	124017-09-23 08:21 G	47017604.72	47017604.85	47017605.03	0.0059	0.0036
Mercury	124017-12-20 09:48 G	47017692.80	47017692.91	47017693.06	0.0059	0.0044
Mercury	124018-03-18 11:14 G	47017780.89	47017780.97	47017781.07	0.0059	0.0052
Venus	124029-10-21 22:31 G	47022016.28	47022016.44	47022016.63	0.0062	0.0037
Venus	124030-06-04 02:07 G	47022241.37	47022241.59	47022241.81	0.0062	0.0004
Venus	124031-01-15 05:14 G	47022466.53	47022466.72	47022466.91	0.0062	0.0029
Venus	124031-08-28 08:07 G	47022691.84	47022691.84	47022691.87	0.0063	0.0062
Earth	124040-08-22 15:48 G	47025973.94	47025974.16	47025974.42	0.0066	0.0022
Moon	124040-08-22 17:29 G	47025974.01	47025974.23	47025974.48	0.0066	0.0020 *
Mercury	124113-03-26 08:36 G	47052486.84	47052486.86	47052486.91	0.0086	0.0082
Mercury	124113-06-22 10:02 G	47052574.84	47052574.92	47052575.01	0.0085	0.0064
Mercury	124113-09-18 11:14 G	47052662.87	47052662.97	47052663.09	0.0085	0.0048
Mercury	124113-12-15 12:41 G	47052750.91	47052751.03	47052751.16	0.0085	0.0031
Mercury	124114-03-13 13:53 G	47052838.96	47052839.08	47052839.22	0.0085	0.0015
Mercury	124114-06-09 15:19 G	47052927.01	47052927.14	47052927.27	0.0085	0.0003
Mercury	124114-09-05 16:31 G	47053015.06	47053015.19	47053015.32	0.0085	0.0020
Mercury	124114-12-02 17:43 G	47053103.13	47053103.24	47053103.37	0.0085	0.0036
Mercury	124115-02-28 18:55 G	47053191.20	47053191.29	47053191.40	0.0085	0.0053
Mercury	124115-05-27 20:21 G	47053279.28	47053279.35	47053279.43	0.0084	0.0069
Venus	124121-02-26 21:48 G	47055381.30	47055381.41	47055381.56	0.0082	0.0067
Venus	124121-10-10 09:48 G	47055606.69	47055606.91	47055607.14	0.0081	0.0010
Moon	124128-02-21 09:05 G	47057931.61	47057931.88	47057932.15	0.0078	0.0005
Earth	124128-02-21 10:17 G	47057931.67	47057931.93	47057932.19	0.0078	0.0009 *
Mercury	124263-05-24 22:17 G	47107332.41	47107332.43	47107332.51	0.0058	0.0057
Mercury	124263-08-20 23:43 G	47107420.40	47107420.49	47107420.62	0.0058	0.0049
Mercury	124263-11-17 01:09 G	47107508.43	47107508.55	47107508.71	0.0058	0.0041
Mercury	124264-02-13 02:36 G	47107596.46	47107596.61	47107596.78	0.0058	0.0033

Mercury	124264-05-11 03:48 G	47107684.50	47107684.66	47107684.85	0.0058	0.0025
Mercury	124264-08-07 05:14 G	47107772.54	47107772.72	47107772.91	0.0058	0.0017
Mercury	124264-11-03 06:41 G	47107860.59	47107860.78	47107860.97	0.0059	0.0009
Mercury	124265-01-30 07:53 G	47107948.64	47107948.83	47107949.03	0.0059	0.0002
Mercury	124265-04-28 09:05 G	47108036.70	47108036.88	47108037.09	0.0059	0.0008
Mercury	124265-07-25 10:17 G	47108124.76	47108124.93	47108125.13	0.0059	0.0016
Mercury	124265-10-21 11:57 G	47108212.82	47108213.00	47108213.18	0.0059	0.0023
Mercury	124266-01-17 12:41 G	47108300.89	47108301.03	47108301.22	0.0059	0.0032
Mercury	124266-04-15 14:07 G	47108388.97	47108389.09	47108389.26	0.0059	0.0040
Mercury	124266-07-12 15:19 G	47108477.05	47108477.14	47108477.28	0.0059	0.0048
Mercury	124266-10-08 16:45 G	47108565.16	47108565.20	47108565.28	0.0059	0.0056
Venus	124278-05-09 02:07 G	47112795.42	47112795.59	47112795.78	0.0062	0.0035
Venus	124278-12-20 05:29 G	47113020.51	47113020.73	47113020.95	0.0062	0.0003
Venus	124279-08-02 08:21 G	47113245.67	47113245.85	47113246.05	0.0062	0.0031
Moon	124288-08-25 14:36 G	47116556.88	47116557.11	47116557.38	0.0066	0.0021
Earth	124288-08-25 15:05 G	47116556.90	47116557.13	47116557.38	0.0066	0.0021 *
Mars	124290-04-11 01:09 G	47117150.26	47117150.55	47117150.87	0.0066	0.0023
Mercury	124361-10-16 16:17 G	47143271.13	47143271.18	47143271.26	0.0085	0.0075
Mercury	124362-01-12 17:43 G	47143359.15	47143359.24	47143359.35	0.0085	0.0057
Mercury	124362-04-10 19:09 G	47143447.19	47143447.30	47143447.42	0.0085	0.0040
Mercury	124362-07-07 20:36 G	47143535.23	47143535.36	47143535.48	0.0085	0.0023
Mercury	124362-10-03 21:48 G	47143623.28	47143623.41	47143623.54	0.0085	0.0007
Mercury	124362-12-30 23:00 G	47143711.33	47143711.46	47143711.60	0.0085	0.0010
Mercury	124363-03-29 00:12 G	47143799.39	47143799.51	47143799.64	0.0085	0.0027
Mercury	124363-06-25 01:38 G	47143887.46	47143887.57	47143887.68	0.0085	0.0043
Mercury	124363-09-21 02:36 G	47143975.53	47143975.61	47143975.71	0.0085	0.0060
Mercury	124363-12-18 03:48 G	47144063.62	47144063.66	47144063.73	0.0084	0.0076
Venus	124369-09-14 01:53 G	47146160.44	47146160.58	47146160.74	0.0082	0.0061
Venus	124370-04-27 13:38 G	47146385.86	47146386.07	47146386.30	0.0081	0.0016
Earth	124376-02-24 00:12 G	47148514.38	47148514.51	47148514.67	0.0078	0.0065

Moon	124376-02-24 00:12 G	47148514.42	47148514.51	47148514.65	0.0078	0.0069 *
Mars	124377-08-12 23:29 G	47149050.20	47149050.48	47149050.78	0.0077	0.0024
Mercury	124511-12-15 03:48 G	47198116.60	47198116.66	47198116.76	0.0058	0.0053
Mercury	124512-03-12 05:14 G	47198204.61	47198204.72	47198204.86	0.0058	0.0045
Mercury	124512-06-08 06:26 G	47198292.64	47198292.77	47198292.94	0.0058	0.0038
Mercury	124512-09-04 07:53 G	47198380.67	47198380.83	47198381.01	0.0058	0.0030
Mercury	124512-12-01 09:19 G	47198468.71	47198468.89	47198469.08	0.0058	0.0022
Mercury	124513-02-27 10:45 G	47198556.76	47198556.95	47198557.14	0.0058	0.0014
Mercury	124513-05-26 11:57 G	47198644.81	47198645.00	47198645.20	0.0059	0.0006
Mercury	124513-08-22 13:24 G	47198732.86	47198733.06	47198733.25	0.0059	0.0002
Mercury	124513-11-18 14:36 G	47198820.92	47198821.11	47198821.31	0.0059	0.0010
Mercury	124514-02-14 15:48 G	47198908.98	47198909.16	47198909.35	0.0059	0.0018
Mercury	124514-05-13 17:14 G	47198997.05	47198997.22	47198997.40	0.0059	0.0026
Mercury	124514-08-09 18:26 G	47199085.12	47199085.27	47199085.44	0.0059	0.0034
Mercury	124514-11-05 19:53 G	47199173.20	47199173.33	47199173.47	0.0059	0.0042
Mercury	124515-02-01 21:19 G	47199261.29	47199261.39	47199261.49	0.0059	0.0050
Mercury	124515-04-30 22:17 G	47199349.43	47199349.43	47199349.46	0.0059	0.0059
Venus	124526-11-24 04:45 G	47203574.54	47203574.70	47203574.89	0.0062	0.0036
Venus	124527-07-07 08:21 G	47203799.63	47203799.85	47203800.07	0.0062	0.0003
Venus	124528-02-17 11:14 G	47204024.79	47204024.97	47204025.17	0.0062	0.0030
Moon	124536-08-28 14:21 G	47207140.09	47207140.10	47207140.17	0.0065	0.0065
Moon	124537-08-29 20:50 G	47207506.14	47207506.37	47207506.63	0.0066	0.0020
Earth	124537-08-30 00:26 G	47207506.30	47207506.52	47207506.78	0.0066	0.0023 *
Mars	124538-07-20 10:45 G	47207830.70	47207830.95	47207831.26	0.0066	0.0033
Mercury	124610-05-08 23:28 G	47234055.42	47234055.48	47234055.56	0.0085	0.0072
Mercury	124610-08-05 00:55 G	47234143.45	47234143.54	47234143.65	0.0085	0.0055
Mercury	124610-11-01 02:07 G	47234231.48	47234231.59	47234231.72	0.0085	0.0039
Mercury	124611-01-28 03:33 G	47234319.52	47234319.65	47234319.78	0.0085	0.0021
Mercury	124611-04-26 05:00 G	47234407.57	47234407.71	47234407.84	0.0085	0.0005
Mercury	124611-07-23 06:12 G	47234495.63	47234495.76	47234495.89	0.0085	0.0012

Mercury	124611-10-19 07:24 G	47234583.69	47234583.81	47234583.94	0.0085	0.0028
Mercury	124612-01-15 08:36 G	47234671.75	47234671.86	47234671.98	0.0085	0.0045
Mercury	124612-04-12 09:33 G	47234759.83	47234759.90	47234760.01	0.0085	0.0062
Mercury	124612-07-09 11:00 G	47234847.92	47234847.96	47234848.02	0.0084	0.0078
Venus	124618-04-01 03:19 G	47236939.52	47236939.64	47236939.80	0.0082	0.0064
Venus	124618-11-12 15:33 G	47237164.93	47237165.15	47237165.38	0.0081	0.0013
Earth	124625-02-27 16:02 G	47239463.91	47239464.17	47239464.44	0.0078	0.0009
Moon	124625-02-27 19:24 G	47239464.04	47239464.31	47239464.58	0.0078	0.0004 *
Mars	124625-11-21 11:14 G	47239730.77	47239730.97	47239731.21	0.0077	0.0054
Mercury	124760-04-09 09:04 G	47288812.83	47288812.88	47288812.94	0.0058	0.0056
Mercury	124760-07-06 09:48 G	47288900.83	47288900.91	47288901.04	0.0058	0.0048
Mercury	124760-10-02 11:14 G	47288988.85	47288988.97	47288989.13	0.0058	0.0041
Mercury	124760-12-29 12:40 G	47289076.88	47289077.03	47289077.20	0.0058	0.0033
Mercury	124761-03-27 14:07 G	47289164.92	47289165.09	47289165.27	0.0058	0.0025
Mercury	124761-06-23 15:19 G	47289252.96	47289253.14	47289253.34	0.0058	0.0017
Mercury	124761-09-19 16:45 G	47289341.01	47289341.20	47289341.40	0.0059	0.0009
Mercury	124761-12-16 17:57 G	47289429.06	47289429.25	47289429.45	0.0059	0.0002
Mercury	124762-03-14 19:24 G	47289517.12	47289517.31	47289517.50	0.0059	0.0007
Mercury	124762-06-10 20:36 G	47289605.18	47289605.36	47289605.55	0.0059	0.0015
Mercury	124762-09-06 21:48 G	47289693.24	47289693.41	47289693.60	0.0059	0.0023
Mercury	124762-12-03 23:00 G	47289781.31	47289781.46	47289781.64	0.0059	0.0031
Mercury	124763-03-02 00:26 G	47289869.38	47289869.52	47289869.67	0.0059	0.0039
Mercury	124763-05-29 01:38 G	47289957.47	47289957.57	47289957.70	0.0059	0.0047
Mercury	124763-08-25 03:04 G	47290045.58	47290045.63	47290045.70	0.0059	0.0055
Venus	124775-06-11 08:36 G	47294353.70	47294353.86	47294354.07	0.0062	0.0033
Venus	124776-01-22 12:12 G	47294578.79	47294579.01	47294579.23	0.0062	0.0000
Venus	124776-09-03 14:50 G	47294803.96	47294804.12	47294804.33	0.0063	0.0034
Moon	124785-09-02 00:12 G	47298089.26	47298089.51	47298089.78	0.0066	0.0013
Earth	124785-09-02 00:40 G	47298089.30	47298089.53	47298089.79	0.0066	0.0017 *
Mercury	124858-09-01 06:12 G	47324751.73	47324751.76	47324751.82	0.0086	0.0080

Mercury	124858-11-28 07:38 G	47324839.74	47324839.82	47324839.92	0.0085	0.0062
Mercury	124859-02-24 09:04 G	47324927.77	47324927.88	47324927.99	0.0085	0.0045
Mercury	124859-05-23 10:16 G	47325015.81	47325015.93	47325016.06	0.0085	0.0029
Mercury	124859-08-19 11:43 G	47325103.86	47325103.99	47325104.12	0.0085	0.0012
Mercury	124859-11-15 12:55 G	47325191.91	47325192.04	47325192.17	0.0085	0.0005
Mercury	124860-02-11 14:07 G	47325279.97	47325280.09	47325280.22	0.0085	0.0022
Mercury	124860-05-09 15:19 G	47325368.03	47325368.14	47325368.27	0.0085	0.0038
Mercury	124860-08-05 16:45 G	47325456.10	47325456.20	47325456.30	0.0085	0.0054
Mercury	124860-11-01 17:43 G	47325544.18	47325544.24	47325544.32	0.0085	0.0071
Venus	124866-10-16 08:36 G	47327718.71	47327718.86	47327719.04	0.0081	0.0054
Venus	124867-05-29 20:36 G	47327944.15	47327944.36	47327944.58	0.0081	0.0022
Earth	124873-03-01 07:52 G	47330046.68	47330046.83	47330047.01	0.0078	0.0060
Moon	124873-03-01 10:45 G	47330046.78	47330046.95	47330047.13	0.0078	0.0057 *